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DICTIONARY FILE UPDATES: 25 JAN 2006 HIGHEST RN 872674-04-9

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\* available and contains the CA role and document type information. \*  
\*  
\*\*\*\*\*

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experimental property data in the original document. For information  
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<http://www.cas.org/ONLINE/UG/regprops.html>

=> d l68 ide can tot

L68 ANSWER 1 OF 5 REGISTRY COPYRIGHT 2006 ACS on STN  
RN 121250-47-3 REGISTRY  
ED Entered STN: 23 Jun 1989  
CN Octadecadienoic acid (9CI) (CA INDEX NAME)  
OTHER NAMES:  
CN 9,11(or 10,12)-Octadecadienoic acid  
CN Conjugated linoleic acid  
DR 342889-37-6  
MF C18 H32 O2  
CI IDS, COM  
SR US Environmental Protection Agency (US EPA)  
LC STN Files: ADISNEWS, AGRICOLA, BIOSIS, CA, CAPLUS, CASREACT, CHEMCATS,  
CHEMLIST, CIN, PIRA, PROMT, TOXCENTER, USPAT2, USPATFULL  
Other Sources: DSL\*\*, TSCA\*\*  
(\*\*Enter CHEMLIST File for up-to-date regulatory information)

CM 1

CRN 57-11-4  
CMF C18 H36 O2

HO<sub>2</sub>C- (CH<sub>2</sub>)<sub>16</sub>-Me

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

964 REFERENCES IN FILE CA (1907 TO DATE)  
 39 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 975 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 144:68736

REFERENCE 2: 144:64022

REFERENCE 3: 144:35803

REFERENCE 4: 144:35487

REFERENCE 5: 144:35479

REFERENCE 6: 144:35356

REFERENCE 7: 144:34285

REFERENCE 8: 144:5986

REFERENCE 9: 144:5962

REFERENCE 10: 144:2884

L68 ANSWER 2 OF 5 REGISTRY COPYRIGHT 2006 ACS on STN

RN 2540-56-9 REGISTRY

ED Entered STN: 16 Nov 1984

CN 9,11-Octadecadienoic acid, (9Z,11E)- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 9,11-Octadecadienoic acid, (E,Z)- (8CI)

OTHER NAMES:

CN 9-cis,11-trans-Linoleic acid

CN 9-cis,11-trans-Octadecadienoic acid

CN 9Z,11E-Octadecadienoic acid

CN Bovinic acid

CN cis-9,trans-11 Conjugated linoleic acid

CN cis-9,trans-11-Octadecadienoic acid

CN Rumenic acid

CN trans-11-cis-9-Octadecadienoic acid

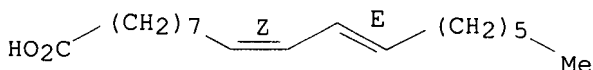
FS STEREOSEARCH

MF C18 H32 O2

CI COM

LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN\*, BIOSIS, CA, CAOLD, CAPLUS,  
 CASREACT, CHEMCATS, CSCHEM, TOXCENTER, USPAT2, USPATFULL  
 (\*File contains numerically searchable property data)

Double bond geometry as shown.



## \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

818 REFERENCES IN FILE CA (1907 TO DATE)  
 17 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 833 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
 1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 144:66139

REFERENCE 2: 144:35808

REFERENCE 3: 144:35803

REFERENCE 4: 144:35786

REFERENCE 5: 144:35781

REFERENCE 6: 144:35479

REFERENCE 7: 144:35412

REFERENCE 8: 144:35396

REFERENCE 9: 144:22207

REFERENCE 10: 144:5984

L68 ANSWER 3 OF 5 REGISTRY COPYRIGHT 2006 ACS on STN

RN 2420-56-6 REGISTRY

ED Entered STN: 16 Nov 1984

CN 10,12-Octadecadienoic acid, (10E,12Z)- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 10,12-Octadecadienoic acid, (Z,E)-

OTHER NAMES:

CN 10-trans,12-cis-Linoleic acid

CN 10-trans-12-cis-Octadecadienoic acid

CN 10E,12Z-Octadecadienoic acid

CN trans-10,cis-12 Conjugated linoleic acid

CN trans-10-cis-12-Octadecadienoic acid

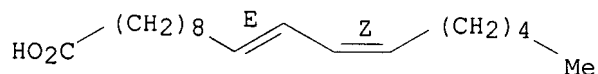
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MF C18 H32 O2

CI COM

LC STN Files: ANABSTR, BEILSTEIN\*, BIOSIS, CA, CAOLD, CAPLUS, CASREACT,  
 CHEMCATS, CSCHM, RTECS\*, TOXCENTER, USPAT2, USPATFULL  
 (\*File contains numerically searchable property data)

Double bond geometry as shown.



## \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

567 REFERENCES IN FILE CA (1907 TO DATE)  
 14 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

579 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 144:66139  
REFERENCE 2: 144:35792  
REFERENCE 3: 144:35786  
REFERENCE 4: 144:35781  
REFERENCE 5: 144:35479  
REFERENCE 6: 144:22207  
REFERENCE 7: 144:5984  
REFERENCE 8: 144:5976  
REFERENCE 9: 144:5962  
REFERENCE 10: 143:476868

L68 ANSWER 4 OF 5 REGISTRY COPYRIGHT 2006 ACS on STN

RN **1839-11-8** REGISTRY

ED Entered STN: 16 Nov 1984

CN **9,11-Octadecadienoic acid (6CI, 8CI, 9CI)** (CA INDEX NAME)

OTHER NAMES:

CN  **$\Delta$ 9,11-Octadecadienoic acid**

CN **9,11-Linoleic acid**

CN CLA 80

CN **Conjugated linoleic acid**

CN Nouracid DE 554

CN NSC 7886

CN Ricineic acid

CN Ricinenic acid

CN Selin CLA

FS 3D CONCORD

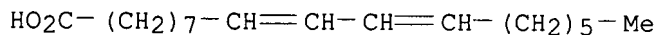
MF **C18 H32 O2**

CI COM

LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN\*, BIOSIS, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMLIST, CIN, EMBASE, IFICDB, IFIPAT, IFIUDB, MEDLINE, PIRA, PROMT, RTECS\*, TOXCENTER, USPAT2, USPATFULL  
(\*File contains numerically searchable property data)

Other Sources: NDSL\*\*, TSCA\*\*

(\*\*Enter CHEMLIST File for up-to-date regulatory information)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

409 REFERENCES IN FILE CA (1907 TO DATE)

44 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

410 REFERENCES IN FILE CAPLUS (1907 TO DATE)

14 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 144:53375

REFERENCE 2: 144:35465  
REFERENCE 3: 144:32217  
REFERENCE 4: 144:8162  
REFERENCE 5: 143:458575  
REFERENCE 6: 143:437909  
REFERENCE 7: 143:432179  
REFERENCE 8: 143:399461  
REFERENCE 9: 143:385719  
REFERENCE 10: 143:385373

L68 ANSWER 5 OF 5 REGISTRY COPYRIGHT 2006 ACS on STN

RN 60-33-3 REGISTRY

ED Entered STN: 16 Nov 1984

CN 9,12-Octadecadienoic acid (9Z,12Z)- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 9,12-Octadecadienoic acid (Z,Z)-

CN Linoleic acid (8CI)

OTHER NAMES:

CN (9Z,12Z)-9,12-Octadecadienoic acid

CN (Z,Z)-9,12-Octadecadienoic acid

CN  $\alpha$ -Linoleic acid

CN 9,12-Octadecadienoic acid, (Z,Z)-

CN 9-cis,12-cis-Linoleic acid

CN 9Z,12Z-Linoleic acid

CN 9Z,12Z-Octadecadienoic acid

CN all-cis-9,12-Octadecadienoic acid

CN cis,cis-Linoleic acid

CN cis- $\Delta^9$ ,12-Octadecadienoic acid

CN cis-9,cis-12-Octadecadienoic acid

CN Emersol 315

CN Extra Linoleic 90

CN Linolic acid

CN Polylin 515

CN Unifac 6550

FS STEREOSEARCH

MF C18 H32 O2

CI COM

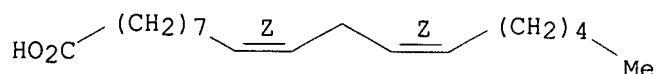
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN\*, BIOSIS, BIOTECHNO, CA, CABA, CAOLD, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DETHERM\*, DIOGENES, DIPPR\*, DRUGU, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN\*, HSDB\*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK\*, MSDS-OHS, NAPRALERT, NIOSHTIC, PATDPASPC, PDLCOM\*, PIRA, PROMT, RTECS\*, SPECINFO, TOXCENTER, TULSA, USPAT2, USPATFULL, VETU

(\*File contains numerically searchable property data)

Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*

(\*\*Enter CHEMLIST File for up-to-date regulatory information)

Double bond geometry as shown.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

34810 REFERENCES IN FILE CA (1907 TO DATE)  
1442 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
34902 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
10 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 144:74824  
REFERENCE 2: 144:74453  
REFERENCE 3: 144:71311  
REFERENCE 4: 144:71251  
REFERENCE 5: 144:71200  
REFERENCE 6: 144:69193  
REFERENCE 7: 144:69191  
REFERENCE 8: 144:69188  
REFERENCE 9: 144:69186  
REFERENCE 10: 144:68986

=> fil hcaplus

FILE 'HCAPLUS' ENTERED AT 10:19:20 ON 27 JAN 2006  
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FILE COVERS 1907 - 27 Jan 2006 VOL 144 ISS 6  
FILE LAST UPDATED: 26 Jan 2006 (20060126/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

=> => d all hitstr tot 166

- L66 ANSWER 1 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN  
AN 2005:1228177 HCAPLUS  
ED Entered STN: 21 Nov 2005  
TI Calcium plus linoleic acid therapy for pregnancy-induced **hypertension**  
AU Herrera, J. A.; Shahabuddin, A. K. M.; Ersheng, G.; Wei, Yuan; Garcia, R. G.; Lopez-Jaramillo, P.  
CS Department of Family Medicine, School of Medicine, Universidad del Valle, Cali, Colombia  
SO International Journal of Gynecology & Obstetrics (2005), 91(3), 221-227  
CODEN: IJGOAL; ISSN: 0020-7292  
PB Elsevier Ireland Ltd.  
DT Journal  
LA English  
CC 1 (Pharmacology)  
AB Objective: To determine the effect of dietary supplementation of calcium plus **conjugated linoleic acid** (calcium-**CLA**) in reducing the incidence of vascular endothelial dysfunction in pregnant women at high risk of developing pregnancy-induced **hypertension** (PIH). Patients and methods: This randomized, double-blind, placebo-controlled trial conducted at 4 outpatient clinics in 2 developing countries recruited 48 healthy primigravidas younger than 19 years or older than 35 years who had a family history of pre-eclampsia and diastolic notch. Twenty-four participants received daily elemental calcium (600 mg) plus **CLA** (450 mg) and 24 received placebo from week 18 to 22 of pregnancy until delivery. Results: Calcium-**CLA** supplementation reduced significantly the incidence of PIH (2 cases [8%] in the study group vs. 10 cases [42%] in the placebo group; relative risk, 0.20; 95% confidence interval, 0.05-0.82; P = .01). Endothelial dysfunction was also significantly reduced after calcium-**CLA** supplementation (in 18 women [75%] vs. 4 women [17%]; P < .001), compared with the placebo group (in 15 [63%] vs. 9 women [38%]; P = .08). Conclusion: In pregnant women at high risk for PIH, calcium-**CLA** supplementation decreases the incidence of PIH and improves endothelial function.
- L66 ANSWER 2 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN  
AN 2005:1108325 HCAPLUS  
DN 144:5895  
ED Entered STN: 17 Oct 2005  
TI Conjugated fatty acids in food and their health benefits  
AU Nagao, Koji; Yanagita, Teruyoshi  
CS Laboratory of Nutrition Biochemistry, Department of Applied Biological Sciences, Saga University, 1 Honjo, Saga, 840-8502, Japan  
SO Journal of Bioscience and Bioengineering (2005), 100(2), 152-157  
CODEN: JBBIF6; ISSN: 1389-1723  
PB Society for Biotechnology, Japan  
DT Journal; General Review  
LA English  
CC 18-0 (Animal Nutrition)  
Section cross-reference(s): 14  
AB A review. Conjugated fatty acids (CFAs) are a mixture of positional and geometric isomers of polyunsatd. fatty acids with conjugated double bonds. Reports indicate that CFAs have potent beneficial effects, including antitumor, antiobese, antiatherogenic and antidiabetic activities. The mols. have also been shown to prevent the onset of **hypertension**. Recent reports suggest that each CFA isomer has different functions, for example the 10trans, 12cis isomer of **conjugated linoleic**

**acid (CLA)** has anticarcinogenic, antiobese and antidiabetic effects, whereas the 9cis, 11trans-**CLA** isomer exerts an anticancer effect. Although it would be interesting to know the effects of CFAs on humans, there are only few reports concerning the anticancer and antiobese effects of **CLA** in humans. More detailed evaluations of the physiol. bioactivities of CFA isomers on lifestyle-related diseases in humans and animals will be of great interest in future studies.

ST review conjugated fatty acid nutrition health

IT Antiobesity agents

Antitumor agents

Health

Human

Hypolipemic agents

Nutrition, animal

(conjugated fatty acids in food and their health benefits)

IT Fatty acids, biological studies

RL: BSU (Biological study, unclassified); BIOL (Biological study)

(conjugated; conjugated fatty acids in food and their health benefits)

RE.CNT 71 THERE ARE 71 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

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L66 ANSWER 3 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2005:812384 HCAPLUS

DN 143:171441

ED Entered STN: 18 Aug 2005

TI Functional foods: Salient features and clinical applications

AU Riezzo, Giuseppe; Chiloiro, Marisa; Russo, Francesco

CS Laboratory of Experimental Pathophysiology, Scientific Institute for Digestive Diseases "S. De Bellis", Castellana Grotte, Italy

SO Current Drug Targets: Immune, Endocrine and Metabolic Disorders (2005), 5(3), 331-337

CODEN: CDTIBT; ISSN: 1568-0088

PB Bentham Science Publishers Ltd.

DT Journal; General Review

LA English

CC 17-0 (Food and Feed Chemistry)

Section cross-reference(s): 1, 18

AB A review. The term "functional food" refers to foods or ingredients of food providing an addnl. physiol. benefit beyond their basic nutritional needs. Health benefits are best obtained through a varied diet containing fruits, vegetables, grains, legumes, and seeds. However, fortified foods and dietary supplements were marketed and food industry have made functional food one of their current leading trends. Recently, the number of functional foods that have a potential benefit on health has hugely grown and scientific evidence is supporting the role of functional foods in prevention and treatment of several diseases. Cancer, diabetes, heart disease and **hypertension** are the most important diseases that

can be treated or prevented by functional foods; other diseases are osteoporosis, abnormal bowel motility, and arthritis. It was estimated that 80% of cancer in USA have a nutrition/diet component suggesting a great impact of functional food and foods components on incidence and treatment of cancer. Numerous factors complicate the evaluation of scientific evidence such as the complexity of food substance, effect on food, metabolic changes associated to dietary changes, the lack of biol. markers of disease development. This paper reviews the scientific evidence supporting this area regarding only those foods and ingredients in which a clear exptl. and clin. evidence exists for their chemopreventive and therapeutic effects.

ST review functional food animal nutrition disease therapy

IT Nutrients

(antinutrients; health benefits of functional foods and clin. applications)

IT Antiarthritics

Antidiabetic agents

**Antihypertensives**

Antitumor agents

Cereal (grain)

Dietary fiber

Fabaceae

Fruit

Health food

Human

Nutrition, animal

Vegetable

(health benefits of functional foods and clin. applications)

IT Carotenes, biological studies

Flavonoids

Phytoestrogens

Vitamins

RL: BSU (Biological study, unclassified); FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(health benefits of functional foods and clin. applications)

IT Antioxidants

(natural; health benefits of functional foods and clin. applications)

IT Phenols, biological studies

RL: BSU (Biological study, unclassified); FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(polyphenols, nonpolymeric; health benefits of functional foods and clin. applications)

IT Fatty acids, biological studies

RL: BSU (Biological study, unclassified); FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(polyunsatd., n-3; health benefits of functional foods and clin. applications)

IT **60-33-3D, Linoleic acid, conjugated**

RL: BSU (Biological study, unclassified); FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(health benefits of functional foods and clin. applications)

RE.CNT 74 THERE ARE 74 CITED REFERENCES AVAILABLE FOR THIS RECORD

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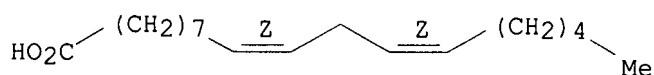
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study of functional food in vitro and in vivo Code 2002/132

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 IT **60-33-3D, Linoleic acid, conjugated**  
 RL: BSU (Biological study, unclassified); FFD (Food or feed use); THU  
 (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (health benefits of functional foods and clin. applications)  
 RN 60-33-3 HCAPLUS  
 CN 9,12-Octadecadienoic acid (9Z,12Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



- L66 ANSWER 4 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN  
 AN **2005:663398** HCAPLUS  
 DN 143:114166  
 ED Entered STN: 28 Jul 2005  
 TI "Cheese - a valuable food in human nutrition"  
 AU Sieber, Robert  
 CS Agroscope Liebefeld-Posieux, Eidgenoessische Forschungsanstalt fuer  
 Nutztiere und Milchwirtschaft (ALP), Bern, Switz.  
 SO Mitteilungen aus Lebensmitteluntersuchung und Hygiene (2005), 96(2),  
 141-170  
 CODEN: MLHYFH; ISSN: 1424-1307  
 PB Bundesamt fuer Gesundheit  
 DT Journal; General Review  
 LA German  
 CC 17-0 (Food and Feed Chemistry)  
 AB A review. Cheese consists mainly of protein, fat and water. It also  
 contains vitamins, minerals and trace elements. There is practically no  
 lactose, which is broken down during cheese ripening. Cheese helps to  
 supply most of the essential amino acids we require through the amino  
 acids contained in its proteins. Bioactive peptides also occur during  
 cheese ripening. **Conjugated linoleic acids**  
 and sphingolipids with their different physiol. effects are discussed as  
 constituents of cheese fat. Moreover, cheese is a rich source of vitamins  
 B2, B12 and calcium with up to 1 g/100 g cheese. Consumption of cheese  
 and milk is extremely important for a sufficient supply of this mineral.  
 In order to prevent osteoporosis occurring in later life, sufficient  
 calcium must be supplied during the first thirty years to build up peak  
 bone mass. Furthermore, the calcium in milk products can lower the risk  
 of **high blood pressure** and reduce the body  
 weight of overweight people. Cheese can also help to prevent dental caries  
 and has a low glycemic index.  
 ST review cheese protein fat amino acid vitamin mineral  
 IT Amines, biological studies  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (biogenic; cheese as important food in human nutrition)

IT Cheese  
Human  
Nutrients  
Nutrition, animal  
(cheese as important food in human nutrition)

IT Amino acids, biological studies  
Fatty acids, biological studies  
Mineral elements, biological studies  
Sphingolipids  
Trace elements, biological studies  
Vitamins  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(cheese as important food in human nutrition)

IT Amino acids, biological studies  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(essential; cheese as important food in human nutrition)

IT Fats and Glyceridic oils, biological studies  
Proteins  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(milk; cheese as important food in human nutrition)

IT **60-33-3D, Linoleic acid, conjugated**  
63-42-3, Lactose  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(cheese as important food in human nutrition)

RE.CNT 157 THERE ARE 157 CITED REFERENCES AVAILABLE FOR THIS RECORD  
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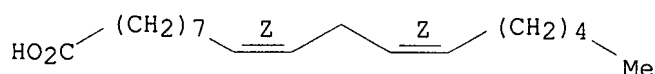
IT 60-33-3D, Linoleic acid, conjugated

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (cheese as important food in human nutrition)

RN 60-33-3 HCAPLUS

CN 9,12-Octadecadienoic acid (9Z,12Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



L66 ANSWER 5 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2005:416150 HCAPLUS

DN 143:132452

ED Entered STN: 16 May 2005

TI The combination of dietary **conjugated linoleic acid** and treadmill exercise lowers gain in body fat mass and enhances lean body mass in high fat-fed male Balb/C mice

AU Bhattacharya, Arunabh; Rahman, Md. Mizanur; Sun, Dongxu; Lawrence, Richard; Mejia, Walter; McCarter, Roger; O'Shea, Marianne; Fernandes, Gabriel

CS Department of Medicine, Division of Clinical Immunology, University of Texas Health Science Center, San Antonio, TX, 78229-3900, USA

SO Journal of Nutrition (2005), 135(5), 1124-1130  
 CODEN: JONUAI; ISSN: 0022-3166

PB American Society for Nutritional Sciences

DT Journal

LA English

CC 18-5 (Animal Nutrition)

AB Nearly half of the U.S. adult population is overweight or obese, which may be related to increased energy intake combined with lack of phys. activity. Obesity increases the risk of several chronic diseases including diabetes, coronary heart disease, **hypertension**, and stroke. **Conjugated linoleic acids** (**CLA**) were shown to decrease fat and increase lean mass in several animal studies. However, the effects of **CLA** in combination with exercise (Ex) on body composition have not been studied in an animal model. We examined the effect of a low concentration of either safflower oil as control (0.5%) or mixed isomers of **CLA** (0.4%) along with treadmill exercise on body composition in male Balb/C mice fed a high-fat diet (20% corn oil) in a 2 + 2 factorial design. **CLA** consumption lowered change in fat mass ( $P < 0.001$ ) confirming the results of other studies, and change in fat mass decreased further ( $P < 0.001$ ) with **CLA** and exercise. Change in lean mass did not increase with exercise alone; it increased, although not significantly, with **CLA** alone and increased significantly ( $P < 0.05$ ) due to the combination of **CLA** and exercise. This effect was accompanied by decreased serum leptin levels and lower leptin mRNA expression in peritoneal fat ( $P < 0.001$ ).



Serum insulin, glucose, tumor necrosis factor (TNF)- $\alpha$ , and interleukin-6 were lower in **CLA**-fed mice than in controls ( $P < 0.05$ ), whereas serum TNF- $\alpha$  was increased by exercise ( $P < 0.05$ ). Exercise increased oxygen consumption and energy expenditure when measured under resting conditions ( $P < 0.05$ ). In summary, the combination of dietary **CLA** and exercise decreased fat mass and increased lean mass in mice fed a high-fat diet, and these effects may be related in part to decreased serum leptin and exercise-induced increases in oxygen consumption and energy expenditure.

- ST exercise diet **conjugated linoleic acid** body fat leptin
- IT Cytokines  
 RL: BSU (Biological study, unclassified); BIOL (Biological study) (adiponectin; dietary **conjugated linoleic acid** and treadmill exercise lowers gain in body fat mass and enhances lean body mass in high fat-fed male Balb/C mice)
- IT Adipose tissue  
 Body weight  
 Energy metabolism, animal  
 Respiration, animal  
 (dietary **conjugated linoleic acid** and treadmill exercise lowers gain in body fat mass and enhances lean body mass in high fat-fed male Balb/C mice)
- IT Interleukin 6  
 Tumor necrosis factors  
 RL: BSU (Biological study, unclassified); BIOL (Biological study) (dietary **conjugated linoleic acid** and treadmill exercise lowers gain in body fat mass and enhances lean body mass in high fat-fed male Balb/C mice)
- IT Diet  
 (supplements; dietary **conjugated linoleic acid** and treadmill exercise lowers gain in body fat mass and enhances lean body mass in high fat-fed male Balb/C mice)
- IT Exercise  
 (treadmill; dietary **conjugated linoleic acid** and treadmill exercise lowers gain in body fat mass and enhances lean body mass in high fat-fed male Balb/C mice)
- IT 50-99-7, D-Glucose, biological studies 9004-10-8, Insulin, biological studies 121250-47-3, **Conjugated linoleic acid** 169494-85-3, Leptin  
 RL: BSU (Biological study, unclassified); BIOL (Biological study) (dietary **conjugated linoleic acid** and treadmill exercise lowers gain in body fat mass and enhances lean body mass in high fat-fed male Balb/C mice)

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IT 121250-47-3, **Conjugated linoleic acid**

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (dietary **conjugated linoleic acid** and  
 treadmill exercise lowers gain in body fat mass and enhances lean body  
 mass in high fat-fed male Balb/C mice)

RN 121250-47-3 HCAPLUS

CN Octadecadienoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 57-11-4

CMF C18 H36 O2

HO2C-(CH2)16-Me

L66 ANSWER 6 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2005:150645 HCAPLUS

DN 143:228786

ED Entered STN: 23 Feb 2005

TI The influence that Momordica charantia Linn tea intake gives to a body

AU Itagaki, Etsuko; Sato, Noriko; Takakuda, Akira; Itagaki, Kazuo

CS Dep. Health Pharmacy, Kyoritsu Univ. Pharmacy, Japan

SO Kyoritsu Yakka Daigaku Kenkyu Nenpo (2004), Volume Date 2003, 48, 1-13

CODEN: KYDKAJ; ISSN: 0452-9731

PB Kyoritsu Yakka Daigaku

DT Journal

LA English

CC 18-7 (Animal Nutrition)

AB The authors, with the goal of control to an appropriate weight through loss of fat, investigated whether Body Composition (BC), i.e., weight and fat (%)

and

the circulatory system, i.e., **Blood Pressure** (BP), would be affected by long-term intake of tea made from Momordica charantia Linn, which has the highest **Conjugated Linoleic Acid (CLA)** content among natural foods that are considered to have minimal neg. impact on the body, over a long period of time. 1. Both Body Mass Index (BMI) and fat (%) decreased regardless of the performance of exercise. 2. For a high BP, results of a decrease were obtained with long-term intake of **CLA**. 3. Results with improvement of cardiopulmonary function alone were not obtained. 4. The diet was implemented without changing lifestyle, so there was no deterioration in phys. condition. Based on these results, intake of **CLA** did have an effect in reducing body weight and fat without changing eating habits and lifestyle, so the fact that it is effective in weight control through fat loss has been obtained as a result.

ST conjugated linoleate Momordica tea body fat wt

IT Tea products

(beverages; influence of Momordica charantia linn tea intake on body weight, body fat, and **blood pressure**)

IT Adipose tissue

**Blood pressure**

Body weight

Momordica charantia

(influence of Momordica charantia linn tea intake on body weight, body fat, and **blood pressure**)IT 121250-47-3, **Conjugated linoleic acid**

RL: BSU (Biological study, unclassified); NPO (Natural product occurrence); BIOL (Biological study); OCCU (Occurrence)

(influence of Momordica charantia linn tea intake on body weight, body fat, and **blood pressure**)

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- IT **121250-47-3, Conjugated linoleic acid**  
 RL: BSU (Biological study, unclassified); NPO (Natural product occurrence); BIOL (Biological study); OCCU (Occurrence)  
 (influence of Momordica charantia linn tea intake on body weight, body fat, and **blood pressure**)
- RN 121250-47-3 HCAPLUS  
 CN Octadecadienoic acid (9CI) (CA INDEX NAME)
- CM 1
- CRN 57-11-4  
 CMF C18 H36 O2

HO<sub>2</sub>C-(CH<sub>2</sub>)<sub>16</sub>-Me

L66 ANSWER 7 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN  
 AN **2005:87444** HCAPLUS  
 DN 142:391395  
 ED Entered STN: 01 Feb 2005  
 TI Nutritional regulation of immunosenescence for heart health  
 AU Watson, Ronald Ross; Zibadi, Sherma; Vazquez, Randy; Larson, Douglas  
 CS Division of Health Promotion Sciences, Mel and Enid Zuckerman Arizona College of Public Health, Tucson, AZ, 85724, USA  
 SO Journal of Nutritional Biochemistry (2005), 16(2), 85-87  
 CODEN: JNBIEL; ISSN: 0955-2863  
 PB Elsevier Inc.  
 DT Journal; General Review  
 LA English  
 CC 18-0 (Animal Nutrition)  
 Section cross-reference(s): 14

AB A review. Immunosenescence via increased inflammatory cytokines may have key regulatory roles in facilitating cardiac infections and heart failure. Cytokine polarization due to aging may directly dysregulate fibroblasts and lead to altered cardiac structure and dysfunction. Some dietary fatty acids could ameliorate heightened inflammatory cytokines and retard cardiac pathol., loss of structural collagen, and premature death from heart failure. The T-helper (Th) 2 cell cytokine levels are very high in seniors with increased risk of heart disease due to suppressed resistance to cardiotropic pathogens. Such inflammatory cytokines deregulate fibroblasts, decrease collagen synthesis, and weaken muscle structure and heart pump function for heart failure and **hypertension**. Dietary supplementation with polyunsatd. n-3 fatty **acids** (PUFA) or **conjugated linoleic acids** may provide a sensible and widely available way to treat and even prevent excessive inflammatory cytokines and their cardiotoxic effects via decreased Th2 and

increased Th1 cytokines. Dietary n-6 PUFA may promote cytokine polarization in seniors, thus exacerbating age-related heart dysfunction.

ST review nutrition polyunsatd fatty acid inflammation cytokine heart disease

IT Aging, animal  
Cardiovascular system, disease  
Human  
Nutrition, animal  
(nutritional regulation of immunosenescence for heart health)

IT Cytokines  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(nutritional regulation of immunosenescence for heart health)

IT Fatty acids, biological studies  
RL: BSU (Biological study, unclassified); FFD (Food or feed use); BIOL  
(Biological study); USES (Uses)  
(polyunsatd.; nutritional regulation of immunosenescence for heart health)

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L66 ANSWER 8 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2004:1011667 HCAPLUS

DN 142:253368

ED Entered STN: 24 Nov 2004

TI A perspective on the current strategies for the treatment of obesity

AU Joyal, Steven V.

CS Global Clinical Research, Pharmaceutical Research Institute, Bristol-Myers Squibb, Princeton, NJ, USA

SO Current Drug Targets: CNS & Neurological Disorders (2004), 3(5), 341-356  
CODEN: CDTCCC; ISSN: 1568-007X

PB Bentham Science Publishers Ltd.

DT Journal; General Review

LA English

CC 1-0 (Pharmacology)

AB A review. The prevalence in obesity has increased dramatically over the past 30 years, more than double in the United States alone. Obesity is associated with an increased risk for type 2 diabetes mellitus, dyslipidemia, **hypertension**, biliary disease, obstructive sleep apnea, and certain types of cancer. The pathophysiol. of obesity is complex, involving behavioral, environmental, and genetic factors. Current treatment options include behavior modification and lifestyle changes which incorporate weight-reducing diets and phys. activity, FDA approved long-term anti-obesity pharmacol. agents sibutramine and orlistat, non-FDA approved over-the-counter (OTC) supplements and nutraceuticals, and, when appropriate, bariatric surgery. Without adequate prevention and treatment of obesity, government agencies have suggested that the direct and indirect costs associated with obesity may overwhelm the healthcare system. This brief review explores the current data available on treatments for the obese patient including the relative merits of different types of

macronutrient composition (e.g., low carbohydrate vs. high carbohydrate diets) of weight-reducing diets, the value of resistance/ strength training in phys. activity programs designed for the obese patient, the safety and efficacy associated with OTC supplements and nutraceuticals for weight reduction (e.g., Ephedra, **conjugated linoleic acid** (CLA), Garcinia cambogia/ hydroxycitric acid (HCA), chromium, pyruvate), the safety and efficacy of FDA-approved long-term obesity treatments sibutramine and orlistat, and bariatric surgery.

ST review obesity diet exercise sibutramine orlistat Ephedra wt redn

IT Surgery  
(bariatric; perspective on current strategies for treatment of obesity)

IT Antiobesity agents  
Body weight  
Ephedra  
Exercise  
Human  
Obesity  
(perspective on current strategies for treatment of obesity)

IT Diet  
(reducing; perspective on current strategies for treatment of obesity)

IT Diet  
(supplements; perspective on current strategies for treatment of obesity)

IT 96829-58-2, Orlistat 106650-56-0, Sibutramine  
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL  
(Biological study); USES (Uses)  
(perspective on current strategies for treatment of obesity)

RE.CNT 180 THERE ARE 180 CITED REFERENCES AVAILABLE FOR THIS RECORD

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L66 ANSWER 9 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2004:876469 HCAPLUS

DN 141:325728

ED Entered STN: 22 Oct 2004

TI Conjugated fatty acids as **hypertension** preventive medicines and health foods

IN Kametani, Takeshi; Iwata, Toshio; Yamamoto, Takaya; Yanagida, Akiyoshi; Nagao, Koji

PA Rinoru Oil Mills Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 12 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM A61K0031-201

ICS A23K0001-16; A23L0001-30; A61K0031-231; A61P0001-02; A61P0001-04; A61P0001-14; A61P0001-16; A61P0003-04; A61P0003-06; A61P0003-10; A61P0009-10; A61P0009-12; A61P0011-00; A61P0013-12; A61P0019-06; A61P0019-10; A61P0025-20; A61P0025-32; A61P0025-34

CC 1-8 (Pharmacology)

Section cross-reference(s): 17, 63

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2004292421	A2	20041021	JP 2003-191299	20030703
	EP 1493440	A1	20050105	EP 2004-13770	20040611
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR				
	US 2005002991	A1	20050106	US 2004-866822	20040615
PRAI	JP 2003-30088	A	20030206		
	JP 2003-191299	A	20030703		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2004292421	ICM	A61K0031-201
	ICS	A23K0001-16; A23L0001-30; A61K0031-231; A61P0001-02; A61P0001-04; A61P0001-14; A61P0001-16; A61P0003-04; A61P0003-06; A61P0003-10; A61P0009-10; A61P0009-12; A61P0011-00; A61P0013-12; A61P0019-06; A61P0019-10; A61P0025-20; A61P0025-32; A61P0025-34
	IPCI	A61K0031-201 [ICM,7]; A23K0001-16 [ICS,7]; A23L0001-30 [ICS,7]; A61K0031-231 [ICS,7]; A61P0001-02 [ICS,7]; A61P0001-04 [ICS,7]; A61P0001-14 [ICS,7]; A61P0001-16 [ICS,7]; A61P0003-04 [ICS,7]; A61P0003-06 [ICS,7]; A61P0003-10 [ICS,7]; A61P0009-10 [ICS,7]; A61P0009-12 [ICS,7]; A61P0011-00 [ICS,7]; A61P0013-12 [ICS,7]; A61P0019-06 [ICS,7]; A61P0019-10 [ICS,7]; A61P0025-20 [ICS,7]; A61P0025-32 [ICS,7]; A61P0025-34 [ICS,7]; A61P0035-00 [ICS,7]
	FTERM	2B150/AB20; 2B150/DA37; 4B018/MD10; 4B018/ME04; 4C206/AA01; 4C206/AA02; 4C206/DA04; 4C206/DB07; 4C206/DB41; 4C206/DB44; 4C206/DB47; 4C206/DB48; 4C206/MA01; 4C206/MA72; 4C206/NA14; 4C206/ZA05; 4C206/ZA36; 4C206/ZA40; 4C206/ZA42; 4C206/ZA45; 4C206/ZA59; 4C206/ZA66; 4C206/ZA67; 4C206/ZA68; 4C206/ZA70; 4C206/ZA75; 4C206/ZA81; 4C206/ZA96; 4C206/ZA97; 4C206/ZB26; 4C206/ZC33; 4C206/ZC35; 4C206/ZC39
EP 1493440	IPCI	A61K0031-20 [ICM,7]; A23L0001-24 [ICS,7]; A23L0001-30 [ICS,7]; A61P0009-00 [ICS,7]
	ECLA	A23K001/16I; A23L001/24; A23L001/30C2; A61K031/20
US 2005002991	IPCI	A61K0031-202 [ICM,7]
	NCL	424/439.000
	ECLA	A23K001/16I; A23L001/24; A23L001/30C2; A61K031/20

AB **Conjugated fatty acids**, including **conjugated linoleic acid**, and their salts and esters are claimed as **hypertension** preventive medicines, feeds, and health foods and drinks. Formulation examples of tablets were given.

ST **hypertension** fatty acid health food

IT **Antihypertensives**

Feed

Health food

**Hypertension**

(conjugated fatty acids as **hypertension** preventive medicines and health foods)

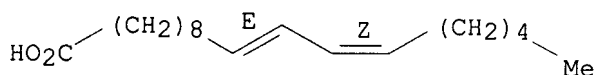
IT Fatty acids, biological studies

RL: PAC (Pharmacological activity); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(conjugated fatty acids as **hypertension** preventive medicines)

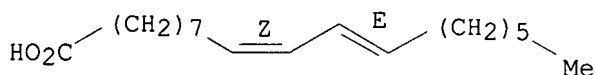
- and health foods)
- IT Beverages  
(health; conjugated fatty acids as **hypertension** preventive medicines and health foods)
- IT Drug delivery systems  
(tablets; conjugated fatty acids as **hypertension** preventive medicines and health foods)
- IT **2420-56-6P, 10-trans, 12-cis-Linoleic acid**  
**2540-56-9P, 9-cis, 11-trans-Linoleic acid**  
RL: PAC (Pharmacological activity); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(conjugated fatty acids as **hypertension** preventive medicines and health foods)
- IT **60-33-3, Linoleic acid**, biological studies  
RL: PAC (Pharmacological activity); RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)  
(conjugated fatty acids as **hypertension** preventive medicines and health foods)
- IT 9001-62-1, Lipase  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(conjugated fatty acids as **hypertension** preventive medicines and health foods)
- IT **2420-56-6P, 10-trans, 12-cis-Linoleic acid**  
**2540-56-9P, 9-cis, 11-trans-Linoleic acid**  
RL: PAC (Pharmacological activity); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(conjugated fatty acids as **hypertension** preventive medicines and health foods)
- RN 2420-56-6 HCAPLUS  
CN 10,12-Octadecadienoic acid, (10E,12Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



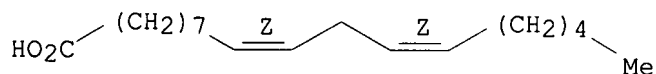
- RN 2540-56-9 HCAPLUS  
CN 9,11-Octadecadienoic acid, (9Z,11E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



- IT **60-33-3, Linoleic acid**, biological studies  
RL: PAC (Pharmacological activity); RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)  
(conjugated fatty acids as **hypertension** preventive medicines and health foods)
- RN 60-33-3 HCAPLUS  
CN 9,12-Octadecadienoic acid (9Z,12Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



- L66 ANSWER 10 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN  
 AN 2004:748975 HCAPLUS  
 DN 141:259891  
 ED Entered STN: 14 Sep 2004  
 TI **Conjugated linoleic acid** prevents the development of essential **hypertension** in spontaneously hypertensive rats  
 AU Inoue, Nao; Nagao, Koji; Hirata, Junichi; Wang, Yu-Ming; Yanagita, Teruyoshi  
 CS Department of Applied Biological Sciences, Laboratory of Nutrition Biochemistry, Saga University, Saga, 840-8502, Japan  
 SO Biochemical and Biophysical Research Communications (2004), 323(2), 679-684  
 CODEN: BBRCA9; ISSN: 0006-291X  
 PB Elsevier  
 DT Journal  
 LA English  
 CC 18-5 (Animal Nutrition)  
 Section cross-reference(s): 14  
 AB **Conjugated linoleic acid (CLA)** is a mixture of positional and geometric isomers of **linoleic acid** found in beef and lamb meat and in dairy products. **CLA** has attracted considerable attention because of potential beneficial biol. effects, including protective effects against several cancers, atherosclerosis, and obesity. Dietary **CLA** could prevent the development of obesity-related **hypertension** in obese animals. In this study, **CLA** (isomer mixture) suppressed the development of non-obese essential **hypertension** in spontaneously hypertensive rats (SHR). After 4 wk of feeding **CLA**, the increase in systolic **blood pressure** was suppressed compared with rats fed linoleic acid. Abdominal adipose tissue weight was also decreased in **CLA**-fed SHR. The contents of arachidonic acid (substrate of eicosanoids production) were not changed, but accumulation of oleic acid, (lipogenesis end-product) was markedly decreased in erythrocyte membrane phospholipids of **CLA**-fed SHR. There were increased levels of blood plasma adiponectin, suggested as a regulatory factor of **hypertension** via enhanced mRNA expression in **CLA**-fed SHR. The **antihypertensive** effects of dietary **CLA** may be due to increased blood plasma adiponectin levels and may be associated with alleviation of erythrocyte membrane abnormalities in SHR.  
 ST nutrition **conjugated linoleic acid**  
**hypertension** erythrocyte phospholipid fatty acid  
 IT Cytokines  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (adiponectin; dietary **conjugated linoleic acid** prevents development of essential **hypertension** in spontaneously hypertensive rats)  
 IT Erythrocyte  
 (cell membrane; dietary **conjugated linoleic acid** prevents development of essential **hypertension** in spontaneously hypertensive rats)  
 IT Adipose tissue  
 Blood plasma

**Blood pressure**

Nutrition, animal

(dietary **conjugated linoleic acid**  
prevents development of essential **hypertension** in  
spontaneously hypertensive rats)

IT Phospholipids, biological studies

mRNA

RL: BSU (Biological study, unclassified); BIOL (Biological study)

(dietary **conjugated linoleic acid**  
prevents development of essential **hypertension** in  
spontaneously hypertensive rats)

IT Fatty acids, biological studies

RL: BSU (Biological study, unclassified); FFD (Food or feed use); BIOL  
(Biological study); USES (Uses)

(dietary **conjugated linoleic acid**  
prevents development of essential **hypertension** in  
spontaneously hypertensive rats)

IT Cell membrane

(erythrocyte; dietary **conjugated linoleic**  
**acid** prevents development of essential **hypertension**  
in spontaneously hypertensive rats)

IT **Hypertension**

(spontaneous; dietary **conjugated linoleic**  
**acid** prevents development of **essential**  
**hypertension** in spontaneously hypertensive rats)

IT 57-10-3, Hexadecanoic **acid**, biological studies 57-11-4,  
Octadecanoic **acid**, biological studies 544-63-8, Tetradecanoic  
**acid**, biological studies 9014-34-0 27104-13-8 28039-99-8  
28984-77-2 31152-45-1 32839-18-2 32839-34-2 81276-10-0

RL: BSU (Biological study, unclassified); BIOL (Biological study)

(dietary **conjugated linoleic acid**  
prevents development of essential **hypertension** in  
spontaneously hypertensive rats)

IT **121250-47-3, Conjugated linoleic acid**

RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)

(dietary **conjugated linoleic acid**  
prevents development of essential **hypertension** in  
spontaneously hypertensive rats)

RE.CNT 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD

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IT 121250-47-3, **Conjugated linoleic acid**

RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)

(dietary **conjugated linoleic acid**

prevents development of essential **hypertension** in  
spontaneously hypertensive rats)

RN 121250-47-3 HCAPLUS

CN Octadecadienoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 57-11-4

CMF C18 H36 O2

HO<sub>2</sub>C-(CH<sub>2</sub>)<sub>16</sub>-Me

L66 ANSWER 11 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2004:448966 HCAPLUS

DN 141:37746

ED Entered STN: 03 Jun 2004

TI Regulatory issues related to functional foods and natural health products  
in Canada: Possible implications for manufacturers of **conjugated  
linoleic acid**

AU Fitzpatrick, Kelley C.

CS Richardson Centre for Functional Foods & Nutraceuticals, University of  
Manitoba, Winnipeg, MB, R3T 2N2, Can.

SO American Journal of Clinical Nutrition (2004), 79(6S), 1217S-1220S  
CODEN: AJCNAC; ISSN: 0002-9165

PB American Society for Clinical Nutrition

DT Journal

LA English

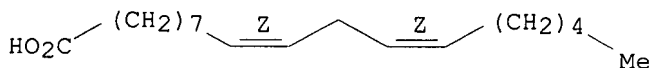
CC 17-2 (Food and Feed Chemistry)

AB The Canadian Food and Drugs Act and Regulations, through its definitions  
of food and drug, currently restricts health-related claims for foods,  
food ingredients, and natural health products (NHPs). Over the past few  
decades, scientific research has led to a large body of information that  
demonstrates the benefits for health of many food and NHP ingredients.  
Health Canada recognized the constraints of the current regulatory  
environment and started to develop regulations related to the allowance of  
health claims for functional foods and NHPs, including those foods and  
NHPs that would contain **conjugated linoleic  
acid** isomers. Health Canada has 3 initiatives under way in the

area of health claims for foods: (1) to adopt the generic health claims of the United States within a Canadian context, (2) to develop scientific stds. of evidence and a guidance document for supporting the validity of product-specific claims, and (3) to develop an overall regulatory framework for functional foods. In 2000, Health Canada announced approval for the use of 5 generic diet-related health claims: Na and **hypertension**, Ca and osteoporosis, saturated and trans fat and cholesterol and coronary artery disease, fruits and vegetables and cancer, and sugar alcs. and dental caries. Under a sep. initiative, Natural Health Products Regulations were published in the Canada Gazette Part II on June 18, 2003. The NHP Regulations came into force on Jan. 1, 2004, with a transition period ranging from 2 y (for site licensing) to 6 y (for product licensing, for products already issued a drug identification number).

ST functional food natural product **conjugated linoleic acid** regulation  
 IT Health food  
 Public health  
 Standards, legal and permissive  
 (regulations of functional foods and natural health products in Canada)  
 IT Natural products  
 RL: BUU (Biological use, unclassified); FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
 (regulations of functional foods and natural health products in Canada)  
 IT Diet  
 (supplements; regulations of functional foods and natural health products in Canada)  
 IT **60-33-3D, Linoleic acid, conjugated**  
 RL: BSU (Biological study, unclassified); FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
 (regulations of functional foods and natural health products in Canada)  
 RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD  
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 (2) Health Canada; <http://canadagazette.gc.ca/partI/2001/20011222/pdf/g1-13551.pdf> 2001  
 (3) Health Canada; <http://canadagazette.gc.ca/partII/2003/20030101/pdf/g2-13701.pdf> 2003  
 (4) Health Canada; <http://canadagazette.gc.ca/partII/2003/20030618/html/sor196-e.html> 2003  
 (5) Health Canada; [http://www.hc-sc.ca/food-aliment/english/subjects/health\\_claims](http://www.hc-sc.ca/food-aliment/english/subjects/health_claims) 2001  
 (6) Health Canada; [http://www.hc-sc.ca/food-aliment/english/subjects/health\\_claims/standards\\_of\\_evidence](http://www.hc-sc.ca/food-aliment/english/subjects/health_claims/standards_of_evidence) 2000  
 (7) Health Canada; <http://www.hc-sc.ca/hpb-dgps/therapeut/htmleng/ffn.html> 1998  
 (8) Health Canada; [http://www.hc-sc.gc.ca/hpfb-dgpsa/sched\\_a\\_review\\_e.html](http://www.hc-sc.gc.ca/hpfb-dgpsa/sched_a_review_e.html) 2003  
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 IT **60-33-3D, Linoleic acid, conjugated**  
 RL: BSU (Biological study, unclassified); FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
 (regulations of functional foods and natural health products in Canada)  
 RN 60-33-3 HCAPLUS  
 CN 9,12-Octadecadienoic acid (9Z,12Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



L66 ANSWER 12 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN  
 AN 2004:448957 HCAPLUS  
 DN 141:190071  
 ED Entered STN: 03 Jun 2004  
 TI Insulin resistance-associated cardiovascular disease: Potential benefits  
 of **conjugated linoleic acid**  
 AU Aminot-Gilchrist, Denise V.; Anderson, Hope D. I.  
 CS Can.  
 SO American Journal of Clinical Nutrition (2004), 79(6S), 1159S-1163S  
 CODEN: AJCNAC; ISSN: 0002-9165  
 PB American Society for Clinical Nutrition  
 DT Journal; General Review  
 LA English  
 CC 18-0 (Animal Nutrition)  
 Section cross-reference(s): 14  
 AB A review. Type 2 diabetes mellitus and associated cardiovascular disease  
 have reached global epidemic proportions. Recent data from the World  
 Health Organization (WHO) Multinational Study of Vascular Disease in  
 Diabetes indicate that cardiovascular disease is the leading cause of  
 mortality (52% of deaths) in individuals with type 2 diabetes mellitus.  
 Although insulin resistance plays a critical role in the pathogenesis of type  
 2 diabetes-related cardiovascular disease, other related risk factors  
 often cluster in a single patient; the combinations of insulin resistance  
 and these risk factors are known as the metabolic syndrome. According to  
 the WHO definition, this constellation of risk factors includes  
**hypertension**, elevated blood plasma triacylglycerol, decreased  
 HDL-cholesterol, central obesity, and microalbuminuria. The Multiple Risk  
 Factor Intervention Trial showed that, although diabetes and insulin  
 resistance are independent risk factors for cardiovascular disease  
 mortality, these other components of the metabolic syndrome confer  
 additive risk. Thus, to effectively address cardiovascular disease in  
 persons with diabetes, intervention should target all these factors.  
**Conjugated linoleic acid (CLA)** could  
 be a candidate agent. The therapeutic potential of dietary **CLA**  
 against insulin resistance-associated cardiovascular disease is discussed on  
 the basis of reported **CLA** effects on individual components of  
 the metabolic syndrome.  
 ST review **conjugated linoleic acid** metabolic  
 syndrome diabetes cardiovascular disease  
 IT Cardiovascular system, disease  
 Human  
 Nutrition, animal  
 (dietary **conjugated linoleic acid**  
 implications for insulin resistance, type 2 diabetes mellitus,  
 metabolic syndrome and cardiovascular disease in humans)  
 IT Disease, animal  
 (metabolic syndrome X; dietary **conjugated linoleic**  
**acid** implications for insulin resistance, type 2 diabetes  
 mellitus, metabolic syndrome and cardiovascular disease in humans)  
 IT Diabetes mellitus  
 (non-insulin-dependent; dietary **conjugated linoleic**  
**acid** implications for insulin resistance, type 2 diabetes  
 mellitus, metabolic syndrome and cardiovascular disease in humans)  
 IT 9004-10-8, Insulin, biological studies  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (dietary **conjugated linoleic acid**  
 implications for insulin resistance, type 2 diabetes mellitus,  
 metabolic syndrome and cardiovascular disease in humans)  
 IT 121250-47-3, **Conjugated linoleic acid**



RL: BSU (Biological study, unclassified); FFD (Food or feed use); BIOL  
(Biological study); USES (Uses)  
(dietary **conjugated linoleic acid**  
implications for insulin resistance, type 2 diabetes mellitus,  
metabolic syndrome and cardiovascular disease in humans)

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IT 121250-47-3, **Conjugated linoleic acid**

RL: BSU (Biological study, unclassified); FFD (Food or feed use); BIOL  
(Biological study); USES (Uses)  
(dietary **conjugated linoleic acid**  
implications for insulin resistance, type 2 diabetes mellitus,  
metabolic syndrome and cardiovascular disease in humans)

RN 121250-47-3 HCAPLUS

CN Octadecadienoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 57-11-4

CMF C18 H36 O2

HO<sub>2</sub>C- (CH<sub>2</sub>)<sub>16</sub>-Me

L66 ANSWER 13 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN  
 AN 2004:344020 HCAPLUS  
 DN 141:6245  
 ED Entered STN: 28 Apr 2004  
 TI Physiological functions of **conjugated linoleic acid**  
 AU Nagao, Koji; Yanagita, Teruyoshi  
 CS Fac. Agric., Saga Univ., Saga, 840-8502, Japan  
 SO Nippon Eiyo, Shokuryo Gakkaishi (2004), 57(2), 105-109  
 CODEN: NESGDC; ISSN: 0287-3516  
 PB Nippon Eiyo, Shokuryo Gakkai  
 DT Journal; General Review  
 LA Japanese  
 CC 18-0 (Animal Nutrition)  
 AB A review. **Conjugated linoleic acids (CLAs)** are a mixture of positional and geometric isomers of **linoleic acid**, which are found preferentially in dairy products and meats. Reported data indicate to have potent beneficial effects, including antitumor, antiobese, antiatherogenic, and antidiabetic activities. The mols. have also been shown to prevent the onset of **hypertension**. The recent reports suggest that each isomer of **CLAs** has different functions, for example 10 trans, 12 cis-**CLA** has anticarcinogenic, antiobese and antidiabetic effects, whereas 9 cis, 11 trans-**CLA** exerts for anticancer effect. It is interesting to know the **CLA** effect on human beings. However, so far as we know, it is scarce on human data and the reported data on antiobese effect is still controversial. More detailed research on the species difference of responsiveness to dietary **CLA** would be required.  
 ST review conjugated linoleate nutrition  
 IT Human  
 Nutrition, animal  
 (nutritional and physiol. functions of **conjugated linoleic acid**)  
 IT 121250-47-3, **Conjugated linoleic acid**  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (nutritional and physiol. functions of **conjugated linoleic acid**)  
 IT 121250-47-3, **Conjugated linoleic acid**  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (nutritional and physiol. functions of **conjugated linoleic acid**)  
 RN 121250-47-3 HCAPLUS  
 CN Octadecadienoic acid (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 57-11-4  
 CMF C18 H36 O2

HO<sub>2</sub>C- (CH<sub>2</sub>)<sub>16</sub>-Me

L66 ANSWER 14 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN  
AN 2004:165494 HCAPLUS  
DN 140:405665  
ED Entered STN: 01 Mar 2004  
TI Milk beyond food  
AU Sharma, R. S.  
CS SMC College of Dairy Science, Anand, 388 110, India  
SO Indian Journal of Agriculture, Environment & Bio-Technology (2003), 1(1),  
1-22  
CODEN: IJAECV  
PB Indian Society of Agricultural Chemists  
DT Journal; General Review  
LA English  
CC 17-0 (Food and Feed Chemistry)  
Section cross-reference(s): 18  
AB A review. Infancy is the only period of the life when one food is  
expected to provide the whole nutrition as well as to ensure protection  
against infection. For the mammalian species, the nature has devised an  
individual fluid food the milk which fulfill the requirement of energy and  
nutrients till the individual grows gradually and learns to be independent  
of such maternal support partially and completely. The milk of individual  
mammalian species is so designed that the major vital constituents like  
fat, protein, carbohydrates, vitamins and minerals are varied in level  
from species to species as per the requirement of their offspring. Man is  
the only species to use the milk of other mammals as food for adults and,  
in a modified form for its own infants. This is because milk is exclusive  
source of nutrients for young and a high grade source of dietary nitrogen  
and essential amino acids for adults. Being recognized as the most  
wholesome and complete single food available in nature, the World Health  
Organization has also earmarked consumption of 220 g of milk per day per  
person. Besides the primary role of milk to provide enough nutrients, the  
recent advances in food and nutrition sciences now support the concept the  
diet may have significant role to play in modulation of various function  
in body.  
ST review milk functional food natural pharmaceutical nutrition  
IT Chelating agents  
(metal; milk as daily food with functional and pharmaceutical  
properties)  
IT Anticoagulants  
**Antihypertensives**  
Antimicrobial agents  
Health food  
Human  
Immunomodulators  
Milk  
Nutrients  
Nutrition, animal  
(milk as daily food with functional and pharmaceutical properties)  
IT Caseins, biological studies  
Natural products, pharmaceutical  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(milk as daily food with functional and pharmaceutical properties)  
IT Albumins, biological studies  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(serum; milk as daily food with functional and pharmaceutical  
properties)  
IT Lactalbumins  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
( $\alpha$ -; milk as daily food with functional and pharmaceutical  
properties)

IT Lactoglobulins  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
( $\beta$ -; milk as daily food with functional and pharmaceutical  
properties)

IT **60-33-3D, Linoleic acid, conjugated**  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(milk as daily food with functional and pharmaceutical properties)

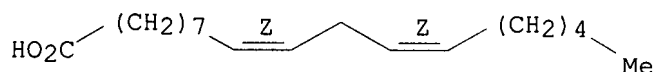
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- IT **60-33-3D, Linoleic acid, conjugated**  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (milk as daily food with functional and pharmaceutical properties)
- RN 60-33-3 HCAPLUS  
 CN 9,12-Octadecadienoic acid (9Z,12Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



L66 ANSWER 15 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN  
 AN **2003:766819** HCAPLUS  
 DN 139:307164  
 ED Entered STN: 01 Oct 2003  
 TI **Conjugated linoleic acid** enhances plasma  
 adiponectin level and alleviates hyperinsulinemia and **hypertension**  
 in Zucker diabetic fatty (fa/fa) rats  
 AU Nagao, Koji; Inoue, Nao; Wang, Yu-Ming; Yanagita, Teruyoshi  
 CS Department of Applied Biological Sciences, Laboratory of Nutrition  
 Biochemistry, Saga University, Saga, 840-8502, Japan

- SO Biochemical and Biophysical Research Communications (2003), 310(2), 562-566  
CODEN: BBRCA9; ISSN: 0006-291X
- PB Elsevier Science
- DT Journal
- LA English
- CC 18-5 (Animal Nutrition)  
Section cross-reference(s): 14
- AB Adiponectin is a hormone secreted by adipocytes which enhances insulin sensitivity. Although insulin resistance and/or compensatory hyperinsulinemia are involved in **hypertension** in obese humans, the relationships between blood plasma adiponectin levels and obesity-related **hypertension** are not clear. The effects of dietary **conjugated linoleic acid** (**CLA**, isomer mixture) as an insulin sensitizer on blood plasma adiponectin and insulin levels and on **blood pressure** were studied in Zucker diabetic fatty (ZDF) rats. During the onset of obesity, **blood pressure** increased in ZDF rats. The increase was prevented by dietary **CLA**. After 8 wk, the plasma insulin and glucose levels were also attenuated by **CLA** feeding. Dietary **CLA** increased plasma adiponectin levels in ZDF rats and the increase was attributed to the enhanced mRNA expression in the white adipose tissue. The increase may alleviate hyperinsulinemia and prevent the onset of **hypertension** in **CLA**-fed ZDF rats.
- ST nutrition **conjugated linoleic acid** blood  
adiponectin hyperinsulinemia **hypertension** diabetes
- IT Cytokines  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(adiponectin; dietary **conjugated linoleic acid** enhances blood plasma adiponectin levels and alleviates hyperinsulinemia and **hypertension** in Zucker diabetic fatty rats)
- IT Blood plasma  
**Blood pressure**  
Diabetes mellitus  
**Hypertension**  
Nutrition, animal  
Obesity  
(dietary **conjugated linoleic acid** enhances blood plasma adiponectin levels and alleviates hyperinsulinemia and **hypertension** in Zucker diabetic fatty rats)
- IT mRNA  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(dietary **conjugated linoleic acid** enhances blood plasma adiponectin levels and alleviates hyperinsulinemia and **hypertension** in Zucker diabetic fatty rats)
- IT Adipose tissue  
(white; dietary **conjugated linoleic acid** enhances blood plasma adiponectin levels and alleviates hyperinsulinemia and **hypertension** in Zucker diabetic fatty rats)
- IT 50-99-7, D-Glucose, biological studies 9004-10-8, Insulin, biological studies 169494-85-3, Leptin  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(dietary **conjugated linoleic acid** enhances blood plasma adiponectin levels and alleviates hyperinsulinemia and **hypertension** in Zucker diabetic fatty rats)

IT 121250-47-3, **Conjugated linoleic acid**  
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
(dietary **conjugated linoleic acid**  
enhances blood plasma adiponectin levels and alleviates  
hyperinsulinemia and **hypertension** in Zucker diabetic fatty  
rats)

RE.CNT 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD  
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IT 121250-47-3, **Conjugated linoleic acid**  
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
(dietary **conjugated linoleic acid**  
enhances blood plasma adiponectin levels and alleviates  
hyperinsulinemia and **hypertension** in Zucker diabetic fatty  
rats)

RN 121250-47-3 HCAPLUS

CN Octadecadienoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 57-11-4

CMF C18 H36 O2

HO<sub>2</sub>C- (CH<sub>2</sub>)<sub>16</sub>-Me

L66 ANSWER 16 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN  
 AN 2003:425241 HCAPLUS  
 DN 139:68473  
 ED Entered STN: 04 Jun 2003  
 TI The 10trans,12cis isomer of **conjugated linoleic acid** suppresses the development of **hypertension** in Otsuka Long-Evans Tokushima fatty rats  
 AU Nagao, Koji; Inoue, Nao; Wang, Yu-Ming; Hirata, Junichi; Shimada, Yuji; Nagao, Toshihiro; Matsui, Toshiro; Yanagita, Teruyoshi  
 CS Department of Applied Biological Sciences, Laboratory of Nutrition Biochemistry, Saga University, Saga, 840-8502, Japan  
 SO Biochemical and Biophysical Research Communications (2003), 306(1), 134-138  
 CODEN: BBRCA9; ISSN: 0006-291X  
 PB Elsevier Science  
 DT Journal  
 LA English  
 CC 18-5 (Animal Nutrition)  
 Section cross-reference(s): 14  
 AB **Conjugated linoleic acid (CLA)** is a mixture of positional and geometric isomers of **linoleic acid** found in beef and lamb meat and in dairy products. **CLA** has attracted considerable attention because of its potentially beneficial biol. effects, including protective effects against cancer, atherosclerosis, and obesity. The 10-trans,12-cis-**CLA** isomer can suppress the increases in **blood pressure** during the onset of obesity in Otsuka Long-Evans Tokushima rats. After 3 wk of feeding 10-trans,12-cis-**CLA**, the systolic **blood pressure** was lower compared with rats fed linoleic acid or 9-cis,11-trans-**CLA**. Abdominal adipose tissue weight was also lower in rats fed 10-trans,12-cis-**CLA**, but not in those fed 9-cis,11-trans-**CLA**. The relative mRNA expressions of angiotensinogen and leptin were suppressed by 10-trans,12-cis-**CLA** in the adipose tissue. The **antihypertensive** effects of 10-trans,12-cis-**CLA** may be related to the decreased secretion of hypertensive adipocytokines from the abdominal adipose tissue.  
 ST nutrition **conjugated linoleic acid**  
**blood pressure hypertension** angiotensinogen  
 leptin  
 IT Adipose tissue  
**Blood pressure**  
 Body weight  
**Hypertension**  
 Nutrition, animal  
 (dietary 10-trans,12-cis and 9-cis,11-trans isomers of **conjugated linoleic acid** effects on development of **hypertension** in Otsuka Long-Evans Tokushima fatty rats)  
 IT mRNA  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (dietary 10-trans,12-cis and 9-cis,11-trans isomers of **conjugated linoleic acid** effects on development of **hypertension** in Otsuka Long-Evans Tokushima fatty rats)  
 IT 9015-82-1, Angiotensin converting enzyme 11002-13-4, Angiotensinogen  
 169494-85-3, Leptin



RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(dietary 10-trans,12-cis and 9-cis,11-trans isomers of  
**conjugated linoleic acid** effects on  
development of **hypertension** in Otsuka Long-Evans Tokushima  
fatty rats)

IT 2420-56-6, 10-trans,12-cis-Octadecadienoic acid

2540-56-9, 9-,11-Octadecadienoic acid 9Z,11E

RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
(dietary 10-trans,12-cis and 9-cis,11-trans isomers of  
**conjugated linoleic acid** effects on  
development of **hypertension** in Otsuka Long-Evans Tokushima  
fatty rats)

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IT 2420-56-6, 10-trans,12-cis-Octadecadienoic acid

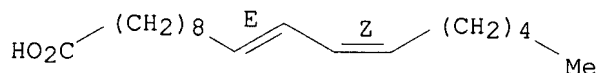
2540-56-9, 9-,11-Octadecadienoic acid 9Z,11E

RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
(dietary 10-trans,12-cis and 9-cis,11-trans isomers of  
**conjugated linoleic acid** effects on  
development of **hypertension** in Otsuka Long-Evans Tokushima  
fatty rats)

RN 2420-56-6 HCAPLUS

CN 10,12-Octadecadienoic acid, (10E,12Z)- (9CI) (CA INDEX NAME)

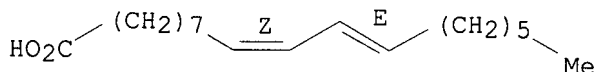
Double bond geometry as shown.



RN 2540-56-9 HCAPLUS

CN 9,11-Octadecadienoic acid, (9Z,11E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



L66 ANSWER 17 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN  
 AN 2003:295795 HCAPLUS  
 DN 139:148928  
 ED Entered STN: 17 Apr 2003  
 TI Effects of cis-9, trans-11 and trans-10, cis-12 **conjugated linoleic acid (CLA)** isomers on immune function in healthy men  
 AU Albers, R.; van der Wielen, R. P. J.; Brink, E. J.; Hendriks, H. F. J.; Dorovska-Taran, V. N.; Mohede, I. C. M.  
 CS Unilever Health Institute, Unilever Research Vlaardingen, Vlaardingen, Neth.  
 SO European Journal of Clinical Nutrition (2003), 57(4), 595-603  
 CODEN: EJCNEQ; ISSN: 0954-3007  
 PB Nature Publishing Group  
 DT Journal  
 LA English  
 CC 18-5 (Animal Nutrition)  
 Section cross-reference(s): 15  
 AB The effects of two different mixts. of the main **conjugated linoleic acid (CLA)** isomers cis-9, trans-11 **CLA** and trans-10, cis-12 **CLA** on human immune function were studied. Double-blind, randomized, parallel, reference-controlled intervention study was designed. Seventy-one healthy males aged 31-69 yr received one of the following treatments: (1) mixture of 50% c9,t11 **CLA** and 50% t10,c12 **CLA** isomers (**CLA** 50:50); (2) mixture of 80% c9,t11 **CLA** and 20% t10,c12 **CLA** isomers (**CLA** 80:20); and (3) sunflower oil fatty acids (reference). The treatments were given as supplements in softgel capsules providing a total of 1.7 g (c9,t11+t10,c12) **CLA** fatty acids (50:50) or 1.6 g (c9,t11+t10,c12) **CLA** glycerides (80:20) per day in treatment groups for 12 wk. Almost twice as many subjects reached protective antibody levels to hepatitis B when consuming CLA50:50 fatty acids (15/24, 62%) compared with subjects consuming the reference substance (7/21, 33%, P=0.075). In subjects consuming **CLA** 80:20 glycerides this was 8/22 (36%). Other aspects of immune function, ie DTH responses, NK cell activity, lymphocyte proliferation and production of TNF- $\alpha$ , IL1- $\beta$ , IL6, IFN- $\gamma$ , IL2, IL4, and PGE2, were not affected. This is the first study that suggests that **CLA** may beneficially affect the initiation of a specific response to a hepatitis B vaccination. This was seen in the **CLA** 50:50, but not in the **CLA** 80:20 group.  
 ST conjugated linoleate diet immunity  
 IT Antigens

- RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(Hepatitis, B; **conjugated linoleic acid** (**CLA**) isomers effect on immune function in healthy men)
- IT Antibodies and Immunoglobulins  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(anti-hepatitis B; **conjugated linoleic acid** (**CLA**) isomers effect on immune function in healthy men)
- IT Glycerides, biological studies  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(blood; **conjugated linoleic acid** (**CLA**) isomers effect on immune function in healthy men)
- IT Human  
Immunity  
(**conjugated linoleic acid** (**CLA**) isomers effect on immune function in healthy men)
- IT Interleukin 1 $\beta$   
Interleukin 2  
Interleukin 4  
Interleukin 6  
Tumor necrosis factors  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(**conjugated linoleic acid** (**CLA**) isomers effect on immune function in healthy men)
- IT **Blood pressure**  
(diastolic; **conjugated linoleic acid** (**CLA**) isomers effect on immune function in healthy men)
- IT Lipoproteins  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(high-d., cholesterol of; **conjugated linoleic acid** (**CLA**) isomers effect on immune function in healthy men)
- IT Allergy  
(hypersensitivity, delayed-type; **conjugated linoleic acid** (**CLA**) isomers effect on immune function in healthy men)
- IT Lipoproteins  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(low-d., cholesterol of; **conjugated linoleic acid** (**CLA**) isomers effect on immune function in healthy men)
- IT Cell proliferation  
(lymphocyte; **conjugated linoleic acid** (**CLA**) isomers effect on immune function in healthy men)
- IT **Blood pressure**  
(systolic; **conjugated linoleic acid** (**CLA**) isomers effect on immune function in healthy men)
- IT Interferons  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
( $\gamma$ ; **conjugated linoleic acid** (**CLA**) isomers effect on immune function in healthy men)
- IT 57-88-5, Cholest-5-en-3-ol (3 $\beta$ )-, biological studies  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(blood; **conjugated linoleic acid** (**CLA**) isomers effect on immune function in healthy men)
- IT 363-24-6, Prostaglandin E2 1839-11-8, **Conjugated linoleic acid** 2420-56-6, 10,12-Octadecadienoic acid, 10E, 12Z  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(**conjugated linoleic acid** (**CLA**) isomers effect on immune function in healthy men)

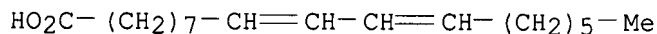
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- IT    **1839-11-8, Conjugated linoleic acid**  
      **2420-56-6, 10,12-Octadecadienoic acid, 10E, 12Z**  
      RL: BSU (Biological study, unclassified); BIOL (Biological study)  
      (bconjugated linoleic acid (CLA))

isomers effect on immune function in healthy men)

RN 1839-11-8 HCAPLUS

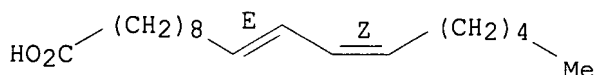
CN 9,11-Octadecadienoic acid (6CI, 8CI, 9CI) (CA INDEX NAME)



RN 2420-56-6 HCAPLUS

CN 10,12-Octadecadienoic acid, (10E,12Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



L66 ANSWER 18 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2003:4170 HCAPLUS

DN 139:656

ED Entered STN: 03 Jan 2003

TI Effects of **conjugated linoleic acid** on anaphylaxis and allergic pruritus

AU Ishiguro, Kyoko; Oku, Hisae; Suitani, Akiko; Yamamoto, Yoshikuni

CS School of Pharmaceutical Sciences, Mukogawa Women's University, Nishinomiya, 663-8179, Japan

SO Biological & Pharmaceutical Bulletin (2002), 25(12), 1655-1657

CODEN: BPBLEO; ISSN: 0918-6158

PB Pharmaceutical Society of Japan

DT Journal

LA English

CC 1-9 (Pharmacology)

AB The effects of **conjugated linoleic acid** (

**CLA**) against anaphylaxis and allergic pruritus were investigated using a in vivo assay. Inhibitory effects of **CLA** were observed on the immediate (type 1) hypersensitivity reaction, with **CLA** significantly suppressing the decrease in **blood pressure** (BP) and blood flow (BF) induced by the hen egg-white lysozyme (HEL)-anaphylactic reaction in ddY mice. After oral administration, **CLA** showed antipruritic activity, with significant inhibition of scratching behavior induced by compound 48/80 (COM), a histamine-release agent. When painted onto the skin, **CLA** also inhibited COM, platelet-activating factor, and protease-induced scratching behavior, and COM-induced vasodilation of the skin. **CLA** offers promise as a drug for the treatment of allergic and inflammatory pruritus not only as an oral but also a topical agent. The present findings demonstrate that **CLA** can be effective for the prevention and treatment of allergic disease with severe pruritus.

ST **conjugated linoleic acid** antiallergy

anaphylaxis pruritus

IT Allergy

Allergy inhibitors

Anaphylaxis

Antihistamines

Pruritus

(effects of **conjugated linoleic acid** on anaphylaxis and allergic pruritus)

IT 121250-47-3, **Conjugated linoleic acid**

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL  
(Biological study); USES (Uses)  
(effects of **conjugated linoleic acid** on  
anaphylaxis and allergic pruritus)

RE.CNT 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD  
RE

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IT **121250-47-3, Conjugated linoleic acid**  
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL  
(Biological study); USES (Uses)  
(effects of **conjugated linoleic acid** on  
anaphylaxis and allergic pruritus)

RN 121250-47-3 HCAPLUS

CN Octadecadienoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 57-11-4

CMF C18 H36 O2

HO<sub>2</sub>C-(CH<sub>2</sub>)<sub>16</sub>-Me

L66 ANSWER 19 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN  
AN **2002:973882** HCAPLUS  
DN 138:152676  
ED Entered STN: 26 Dec 2002  
TI Macronutrient innovations: the role of fats and sterols in human health  
AU Li, Duo; Sinclair, Andrew J.  
CS Department of Food Science, Hangzhou University of Commerce, Hangzhou,  
310035, Peop. Rep. China  
SO Asia Pacific Journal of Clinical Nutrition (2002), 11(Suppl.), S155-S162  
CODEN: APJNFQ; ISSN: 0964-7058  
PB Blackwell Publishing Asia Pty Ltd.  
DT Journal; General Review

LA English  
 CC 18-0 (Animal Nutrition)  
 Section cross-reference(s): 14  
 AB A review. Dietary intakes of fats and sterols play critical roles in human health. High proportions of saturated fats, which increase blood cholesterol levels, are mainly found in animal fats and some plant oil (cocoa butter, palm oil). The dominant polyunsatd. fatty acid (PUFA) in Western diets is linoleic acid (LA; C18:2n-6), an essential fatty acid commonly found in vegetable seed oils. This is the parent fatty acid of n-6 series of PUFA, which can be converted in vivo to C20 and C22 n-6 long-chain (LC) PUFA. The  $\alpha$ -linolenic acid (ALA; C18:3n-3) is less abundant than LA and is another essential fatty acid. ALA is also present in some vegetable oils such as perilla, flaxseed, canola, soybean and walnut oils. ALA is the precursor of C20 and C22 n-3 LC PUFA. Sterols are widely distributed in animal and plant tissues, with cholesterol being the major sterol in animal tissue and  $\beta$ -sitosterol, campesterol and stigmasterol in plants. Increased dietary intakes of saturated fat and (to a lesser extent) of cholesterol, raise blood plasma or serum total and low-d. lipoprotein (LDL)-cholesterol, while PUFA decrease these levels. Plasma or serum levels of lipids and lipoprotein lipids can also be decreased by plant sterols (phytosterols) and diacylglycerols (DAG). **Conjugated linoleic acid (CLA, cis-9, trans-11-C18:2)** has some anticancer and antidiabetic activities. Fat in the DAG form has also some antiobesity effects. The n-3 PUFA have beneficial effects on increased heart rate variability, decreased risk of stroke, decrease of both systolic and diastolic **blood pressure**, and may be effective in managing depression in adults. The  $\gamma$ -linolenic acid (GLA) and phytosterols have anti-inflammatory activities. The GLA, when combined with docosahexaenoic acid (DHA, C22:6n-3), has beneficial effects in hyperactive children.

ST review nutrition fat fatty acid sterol biochem physiol  
 IT Human  
 Nutrition, animal  
 (dietary fats, fatty acids and sterols role in human health and their food industrial innovations)  
 IT Fats and Glyceridic oils, biological studies  
 Fatty acids, biological studies  
 Sterols  
 RL: BSU (Biological study, unclassified); FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
 (dietary fats, fatty acids and sterols role in human health and their food industrial innovations)

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L66 ANSWER 20 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2002:428649 HCAPLUS

DN 136:400982

ED Entered STN: 07 Jun 2002

TI Dietary composition containing **conjugated linoleic acid**, calcium and other nutrients for cardiovascular disease prevention.

IN Bendich, Adrienne

PA Smithkline Beecham Corporation, USA

SO PCT Int. Appl., 16 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM A61K

CC 17-6 (Food and Feed Chemistry)

Section cross-reference(s): 18, 63

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002043662	A2	20020606	WO 2001-US44872	20011129
	WO 2002043662	A3	20030123		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			

CA 2427681	AA	20020606	CA 2001-2427681	20011129
AU 2002019949	A5	20020611	AU 2002-19949	20011129
EP 1347745	A2	20031001	EP 2001-998311	20011129
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2004514685	T2	20040520	JP 2002-545641	20011129
PRAI US 2000-253897P	P	20001129		
WO 2001-US44872	W	20011129		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2002043662	ICM	A61K
	IPCI	A61K [ICM,7]
	ECLA	A23L001/30C2; A23L001/302; A23L001/304
CA 2427681	IPCI	A61K0009-14 [ICM,7]; A61K0009-20 [ICS,7]; A61K0009-48 [ICS,7]
EP 1347745	IPCI	A61K0009-14 [ICM,7]; A61K0009-20 [ICS,7]; A61K0009-48 [ICS,7]
JP 2004514685	IPCI	A61K0031-201 [ICM,7]; A23L0001-30 [ICS,7]; A23L0001-302 [ICS,7]; A23L0001-304 [ICS,7]; A23L0001-307 [ICS,7]; A61K0031-355 [ICS,7]; A61K0031-375 [ICS,7]; A61K0031-409 [ICS,7]; A61K0031-4415 [ICS,7]; A61K0031-525 [ICS,7]; A61K0033-06 [ICS,7]; A61P0003-00 [ICS,7]; A61P0003-04 [ICS,7]; A61P0003-06 [ICS,7]; A61P0009-00 [ICS,7]
	FTERM	4B018/MD04; 4B018/MD20; 4B018/MD23; 4B018/MD25; 4B018/MD26; 4B018/ME01; 4C086/AA01; 4C086/AA02; 4C086/BA09; 4C086/BA18; 4C086/BC18; 4C086/CB04; 4C086/CB09; 4C086/HA04; 4C086/MA03; 4C086/MA04; 4C086/NA14; 4C086/ZA70; 4C086/ZC21; 4C086/ZC33; 4C086/ZC35; 4C206/AA01; 4C206/AA02; 4C206/DA05; 4C206/MA03; 4C206/MA04; 4C206/NA14; 4C206/ZA70; 4C206/ZC21; 4C206/ZC33; 4C206/ZC35

AB The invention provides a composition for oral administration comprising a mixture of **conjugated linoleic acid (CLA)**, docosahexaenoic acid "DHA", vitamin E, vitamin C, vitamin B6, vitamin B12, folic acid, and calcium together with a suitable carrier. These compns. are particularly useful as dietary supplements administered to reduce the risk factors of cardiovascular disease, such as elevated serum cholesterol levels and **high blood pressure**.

ST cardiovascular disease prevention diet conjugated linoleate calcium vitamin

IT Antiarteriosclerotics  
(antiatherosclerotics; dietary composition containing **conjugated linoleic acid**, calcium and other nutrients for cardiovascular disease prevention.)

IT Drug delivery systems  
(capsules, soft; dietary composition containing **conjugated linoleic acid**, calcium and other nutrients for cardiovascular disease prevention.)

IT Drug delivery systems  
(capsules; dietary composition containing **conjugated linoleic acid**, calcium and other nutrients for cardiovascular disease prevention.)

IT **Antihypertensives**  
Antioxidants  
Food additives  
(dietary composition containing **conjugated linoleic**

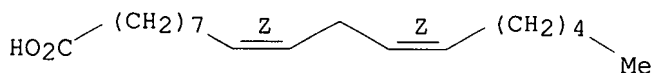
- acid**, calcium and other nutrients for cardiovascular disease prevention.)
- IT Glycerides, biological studies  
RL: BSU (Biological study, unclassified); BIOL (Biological study) (dietary composition containing **conjugated linoleic acid**, calcium and other nutrients for cardiovascular disease prevention.)
- IT Lipoproteins  
RL: BSU (Biological study, unclassified); BIOL (Biological study) (high-d.; dietary composition containing **conjugated linoleic acid**, calcium and other nutrients for cardiovascular disease prevention.)
- IT Cardiovascular system, disease  
(inhibitors of; dietary composition containing **conjugated linoleic acid**, calcium and other nutrients for cardiovascular disease prevention.)
- IT Lipoproteins  
RL: BSU (Biological study, unclassified); BIOL (Biological study) (low-d.; dietary composition containing **conjugated linoleic acid**, calcium and other nutrients for cardiovascular disease prevention.)
- IT Fatty **acids**, biological studies  
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(polyunsatd., n-3; dietary composition containing **conjugated linoleic acid**, calcium and other nutrients for cardiovascular disease prevention.)
- IT Drug delivery systems  
(sachets; dietary composition containing **conjugated linoleic acid**, calcium and other nutrients for cardiovascular disease prevention.)
- IT Drug delivery systems  
(tablets; dietary composition containing **conjugated linoleic acid**, calcium and other nutrients for cardiovascular disease prevention.)
- IT 57-88-5, Cholesterol, biological studies  
RL: BSU (Biological study, unclassified); BIOL (Biological study) (blood; dietary composition containing **conjugated linoleic acid**, calcium and other nutrients for cardiovascular disease prevention.)
- IT 6027-13-0, Homocysteine  
RL: BSU (Biological study, unclassified); BIOL (Biological study) (dietary composition containing **conjugated linoleic acid**, calcium and other nutrients for cardiovascular disease prevention.)
- IT 50-81-7, Vitamin C, biological studies 59-30-3, Folic **acid**, biological studies 60-33-3D, **Linoleic acid**, **conjugated** derivs. 68-19-9, Vitamin B12 1406-18-4, Vitamin E 6217-54-5, Cervonic **acid** 7440-70-2, Calcium, biological studies 8059-24-3, Vitamin B6  
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(dietary composition containing **conjugated linoleic acid**, calcium and other nutrients for cardiovascular disease prevention.)
- IT 60-33-3D, **Linoleic acid**, **conjugated** derivs.  
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(dietary composition containing **conjugated linoleic**

acid, calcium and other nutrients for cardiovascular disease prevention.)

RN 60-33-3 HCAPLUS

CN 9,12-Octadecadienoic acid (9Z,12Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



L66 ANSWER 21 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2002:236406 HCAPLUS

DN 136:268150

ED Entered STN: 28 Mar 2002

TI Topical emollient composition containing fatty acids for ameliorating changes in subcutaneous adipose tissue

IN Allen, Michael P.

PA USA

SO U.S., 16 pp.

CODEN: USXXAM

DT Patent

LA English

IC ICM A61K0035-78

ICS A01N0065-00

INCL 424740000

CC 63-6 (Pharmaceuticals)

Section cross-reference(s): 1, 2, 18, 62

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6361806	B1	20020326	US 2000-511056	20000223
PRAI	US 2000-511056		20000223		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 6361806	ICM	A61K0035-78
	ICS	A01N0065-00
	INCL	424740000
	IPCI	A61K0035-78 [ICM,7]; A01N0065-00 [ICS,7]
	NCL	424/740.000; 424/401.000; 424/484.000; 424/486.000; 424/725.000; 424/764.000; 424/776.000; 514/886.000; 514/887.000; 514/899.000
	ECLA	A61K031/015+M; A61K031/22+M; A61K035/78+M; A61K045/06+M; A61K031/045+M; A61K031/201+M; A61K031/202+M

AB Emollient comps. for topical administration consisting of hydrophilic/hydrophobic emulsions containing a polyacrylate carrier, a vehicle, a mixture of C16:0, C18:0, C18:1 fatty acids and derivs. as penetrants, a balanced mixture of unsatd. C18:1, C18:2 and C18:3 fatty acids, a natural anti-inflammatory compound, a natural analgesic compound, a natural estrogenic compound and a fragrance are described. They are useful for ameliorating symptoms of disease, including mammary fibrocystic disease, cyclic mastitis, inflammation and general and specific pre- and post-menopausal pain and swelling. For example, a cream emulsion was prepared by combining (A) a carrier containing Carbomer 940 0.80 g and water 43.3 g, (B) a vehicle/penetrant phase containing urea 2.95 g, imidurea 0.05 g, sorbitol 1.00 g, sodium borate 0.05 g, sodium ascorbyl phosphate 0.26 g,

and water 14.43, and (C) a hydrophobic phase containing ethanol 10.0 g, isopropyl alc. 6.000 g, propylene glycol 6.00 g, bisabolol 2.00 g, triethanolamine 1.00 g, Brij 99 1.00 g,  $\alpha$ -tocopherol 0.10 g, glycerin 0.10 g, methylparaben 0.05 g, propylparaben 0.05 g, **conjugate linoleic acid** 5.00 g, borage oil 5.00 g, vanilla fragrance 0.86 g, and optionally **linoleic acid** 2.75 g and  $\gamma$ -linolenic **acid** 1.25 g.

- ST essential fatty acid topical emulsion adipose tissue; analgesic antiinflammatory estrogen emollient mammary gland; menopause analgesic antiinflammatory estrogen emollient
- IT Essential oils  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(Artemisia; topical emollient composition containing essential fatty acids for ameliorating changes in s.c. adipose tissue)
- IT Fatty acids, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(C16; topical emollient composition containing essential fatty acids for ameliorating changes in s.c. adipose tissue)
- IT Fatty acids, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(C16-20; topical emollient composition containing essential fatty acids for ameliorating changes in s.c. adipose tissue)
- IT Fatty acids, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(C18-unsatd.; topical emollient composition containing essential fatty acids for ameliorating changes in s.c. adipose tissue)
- IT Fatty acids, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(C18; topical emollient composition containing essential fatty acids for ameliorating changes in s.c. adipose tissue)
- IT Fatty acids, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(C20-22-unsatd.; topical emollient composition containing essential fatty acids for ameliorating changes in s.c. adipose tissue)
- IT Essential oils  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(Matricaria; topical emollient composition containing essential fatty acids for ameliorating changes in s.c. adipose tissue)
- IT Skin, disease  
(aging, wrinkles; topical emollient composition containing essential fatty acids for ameliorating changes in s.c. adipose tissue)
- IT Dermatitis  
(atopic; topical emollient composition containing essential fatty acids for ameliorating changes in s.c. adipose tissue)
- IT Mammary gland, disease  
(benign; topical emollient composition containing essential fatty acids for ameliorating changes in s.c. adipose tissue)
- IT Fats and Glyceridic oils, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(blackcurrant; topical emollient composition containing essential fatty acids for ameliorating changes in s.c. adipose tissue)
- IT Fats and Glyceridic oils, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(borage seed; topical emollient composition containing essential fatty acids for

ameliorating changes in s.c. adipose tissue)  
 IT Cachexia  
 (cancerous; topical emollient composition containing essential fatty acids  
 for ameliorating changes in s.c. adipose tissue)  
 IT Mammary gland  
 (carcinoma, inhibitors; topical emollient composition containing essential  
 fatty acids for ameliorating changes in s.c. adipose tissue)  
 IT Essential oils  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (chamomile; topical emollient composition containing essential fatty acids  
 for ameliorating changes in s.c. adipose tissue)  
 IT Fats and Glyceridic oils, biological studies  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (chia; topical emollient composition containing essential fatty acids for  
 ameliorating changes in s.c. adipose tissue)  
 IT Epithelium  
 (cutaneous, cornified or keratinized; topical emollient composition  
 containing essential fatty acids for ameliorating changes in s.c. adipose tissue)  
 IT Mammary gland, disease  
 (cyclic mastalgia; topical emollient composition containing essential fatty  
 acids for ameliorating changes in s.c. adipose tissue)  
 IT Mammary gland, disease  
 (cyst; topical emollient composition containing essential fatty acids for  
 ameliorating changes in s.c. adipose tissue)  
 IT Nerve, disease  
 (diabetic neuropathy; topical emollient composition containing essential  
 fatty acids for ameliorating changes in s.c. adipose tissue)  
 IT Skin, disease  
 (dry; topical emollient composition containing essential fatty acids for  
 ameliorating changes in s.c. adipose tissue)  
 IT Drug delivery systems  
 (emollients; topical emollient composition containing essential fatty acids  
 for ameliorating changes in s.c. adipose tissue)  
 IT Drug delivery systems  
 (emulsions, topical; topical emollient composition containing essential  
 fatty acids for ameliorating changes in s.c. adipose tissue)  
 IT Skin  
 (epithelium, cornified or keratinized; topical emollient composition  
 containing essential fatty acids for ameliorating changes in s.c. adipose tissue)  
 IT Fatty acids, biological studies  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (essential; topical emollient composition containing essential fatty acids  
 for ameliorating changes in s.c. adipose tissue)  
 IT Fatty acids, biological studies  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (esters, macrogol; topical emollient composition containing essential fatty  
 acids for ameliorating changes in s.c. adipose tissue)  
 IT Fatty acids, biological studies  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (ethoxylated; topical emollient composition containing essential fatty  
 acids for

ameliorating changes in s.c. adipose tissue)

IT Fats and Glyceridic oils, biological studies  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (evening primrose; topical emollient composition containing essential fatty acids for ameliorating changes in s.c. adipose tissue)

IT Mammary gland, neoplasm  
 (fibroadenoma; topical emollient composition containing essential fatty acids for ameliorating changes in s.c. adipose tissue)

IT Mammary gland, disease  
 (fibrocystic; topical emollient composition containing essential fatty acids for ameliorating changes in s.c. adipose tissue)

IT Hand  
 Nail (anatomical)  
 (fingernail, discolored or splitting; topical emollient composition containing essential fatty acids for ameliorating changes in s.c. adipose tissue)

IT Fats and Glyceridic oils, biological studies  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (grape seed; topical emollient composition containing essential fatty acids for ameliorating changes in s.c. adipose tissue)

IT Fats and Glyceridic oils, biological studies  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (hemp; topical emollient composition containing essential fatty acids for ameliorating changes in s.c. adipose tissue)

IT Infection  
 (herpes zoster; topical emollient composition containing essential fatty acids for ameliorating changes in s.c. adipose tissue)

IT Mammary gland, disease  
 (hyperplasia; topical emollient composition containing essential fatty acids for ameliorating changes in s.c. adipose tissue)

IT **Hypertension**  
 (in adipose tissue; topical emollient composition containing **essential** fatty acids for ameliorating changes in s.c. adipose tissue)

IT Fats and Glyceridic oils, biological studies  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (kukui; topical emollient composition containing essential fatty acids for ameliorating changes in s.c. adipose tissue)

IT Myoma  
 (leiomyoma; topical emollient composition containing essential fatty acids for ameliorating changes in s.c. adipose tissue)

IT Milk  
 (low production; topical emollient composition containing essential fatty acids for ameliorating changes in s.c. adipose tissue)

IT Adenoma  
 (mammary fibroadenoma; topical emollient composition containing essential fatty acids for ameliorating changes in s.c. adipose tissue)

IT Antitumor agents  
 (mammary gland carcinoma; topical emollient composition containing essential fatty acids for ameliorating changes in s.c. adipose tissue)

IT Cyst, pathological  
 Hyperplasia  
 (mammary; topical emollient composition containing essential fatty acids for

ameliorating changes in s.c. adipose tissue)

IT Circulation  
(microcirculation, disorder; topical emollient composition containing essential fatty acids for ameliorating changes in s.c. adipose tissue)

IT Analgesics  
Anti-inflammatory agents  
(natural; topical emollient composition containing essential fatty acids for ameliorating changes in s.c. adipose tissue)

IT Estrogens  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(natural; topical emollient composition containing essential fatty acids for ameliorating changes in s.c. adipose tissue)

IT Nerve, disease  
(neuropathy, shingles associated; topical emollient composition containing essential fatty acids for ameliorating changes in s.c. adipose tissue)

IT Detergents  
(nonionic; topical emollient composition containing essential fatty acids for ameliorating changes in s.c. adipose tissue)

IT Phaseolus vulgaris  
(oils; topical emollient composition containing essential fatty acids for ameliorating changes in s.c. adipose tissue)

IT Drug delivery systems  
(ointments, creams; topical emollient composition containing essential fatty acids for ameliorating changes in s.c. adipose tissue)

IT Menopause  
(postmenopause, estrogen insufficiency; topical emollient composition containing essential fatty acids for ameliorating changes in s.c. adipose tissue)

IT Ovarian cycle  
(premenstrual syndrome; topical emollient composition containing essential fatty acids for ameliorating changes in s.c. adipose tissue)

IT Diet  
(reducing; topical emollient composition containing essential fatty acids for ameliorating changes in s.c. adipose tissue)

IT Connective tissue  
(s.c., disorder; topical emollient composition containing essential fatty acids for ameliorating changes in s.c. adipose tissue)

IT Adipose tissue  
(s.c.; topical emollient composition containing essential fatty acids for ameliorating changes in s.c. adipose tissue)

IT Skin, disease  
(scar; topical emollient composition containing essential fatty acids for ameliorating changes in s.c. adipose tissue)

IT Fats and Glyceridic oils, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(sesame; topical emollient composition containing essential fatty acids for ameliorating changes in s.c. adipose tissue)

IT Skin, disease  
(shingles associated; topical emollient composition containing essential fatty acids for ameliorating changes in s.c. adipose tissue)

IT Foot  
Nail (anatomical)  
(toenail, discolored or splitting; topical emollient composition containing essential fatty acids for ameliorating changes in s.c. adipose tissue)



IT Aging, animal  
**Antihypertensives**  
 Antitumor agents  
 Dermatitis  
 Eczema  
 Fertility disorders  
 Malnutrition  
 Mastitis  
 Odor and Odorous substances  
 Perfumes  
 Permeation enhancers  
 Psoriasis  
 Sjogren's syndrome  
 Starvation, animal  
 (topical emollient composition containing essential fatty acids for  
 ameliorating  
 changes in s.c. adipose tissue)

IT Canola oil  
 Corn oil  
 Cottonseed oil  
 Glycerides, biological studies  
 Linseed oil  
 Phospholipids, biological studies  
 Safflower oil  
 Soybean oil  
 Sunflower oil  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (topical emollient composition containing essential fatty acids for  
 ameliorating  
 changes in s.c. adipose tissue)

IT Domestic animal  
 Human  
 (topical emollient composition containing essential fatty acids for  
 ameliorating  
 changes in s.c. adipose tissue of humans and domestic animals)

IT Drug delivery systems  
 (topical, sustained-release; topical emollient composition containing  
 essential  
 fatty acids for ameliorating changes in s.c. adipose tissue)

IT Diabetes mellitus  
 (vascular complication of; topical emollient composition containing  
 essential  
 fatty acids for ameliorating changes in s.c. adipose tissue)

IT Fats and Glyceridic oils, biological studies  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (vegetable; topical emollient composition containing essential fatty acids  
 for  
 ameliorating changes in s.c. adipose tissue)

IT Fats and Glyceridic oils, biological studies  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (walnut; topical emollient composition containing essential fatty acids for  
 ameliorating changes in s.c. adipose tissue)

IT Fats and Glyceridic oils, biological studies  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (wheat germ; topical emollient composition containing essential fatty acids  
 for  
 ameliorating changes in s.c. adipose tissue)

IT Essential oils  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (yarrow; topical emollient composition containing essential fatty acids for

ameliorating changes in s.c. adipose tissue)  
 IT 56-81-5, Glycerin, biological studies 57-10-3, Palmitic acid, biological studies 57-13-6, Urea, biological studies 57-55-6, Propylene glycol, biological studies 57-88-5, Cholesterol, biological studies 60-33-3, Linoleic acid, biological studies 64-17-5, Ethanol, biological studies 80-59-1D, Tiglic acid, esters 94-13-3, Propylparaben 94-26-8, Butylparaben 99-76-3, Methylparaben 99-96-7, p-Hydroxybenzoic acid, biological studies 110-27-0, Isopropyl myristate 112-80-1, Oleic acid, biological studies 142-91-6, Isopropyl palmitate 275-51-4, Azulene 373-49-9, Palmitoleic acid 463-40-1,  $\alpha$ -Linolenic acid 506-26-3,  $\gamma$ -Linolenic acid 506-32-1, Arachidonic acid 515-69-5,  $\alpha$ -Bisabolol 515-69-5D, Bisabolol, hydroxy derivs. 529-05-5, 7-Ethyl-1,4-dimethylazulene 1783-84-2, Dihomo- $\gamma$ -linolenic acid 1839-11-8, **Conjugated linoleic acid** 9003-01-4, Polyacrylic acid 9004-98-2, Brij 98 9005-00-9, Brij 721 9007-16-3, Carbomer 934 23089-26-1, Levomenol 29656-58-4D, Hydroxybenzoic acid, alkyl esters 39236-46-9, Imidurea 57916-92-4, Carbomer 934P 76050-42-5, Carbomer 940 96827-24-6, Carbomer 1342

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (topical emollient composition containing essential fatty **acids** for ameliorating changes in s.c. adipose tissue)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Crandall; US 5945409 A 1999 HCAPLUS
- (2) Deckner; US 5989536 A 1999 HCAPLUS
- (3) Friedman; US 5811129 A 1998 HCAPLUS

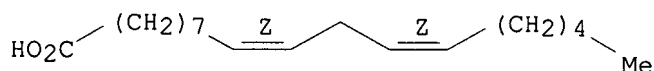
IT 60-33-3, Linoleic acid, biological studies 1839-11-8, **Conjugated linoleic acid**

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (topical emollient composition containing essential fatty **acids** for ameliorating changes in s.c. adipose tissue)

RN 60-33-3 HCAPLUS

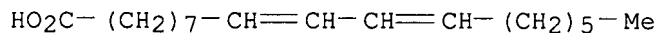
CN 9,12-Octadecadienoic acid (9Z,12Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 1839-11-8 HCAPLUS

CN 9,11-Octadecadienoic acid (6CI, 8CI, 9CI) (CA INDEX NAME)



L66 ANSWER 22 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2001:523307 HCAPLUS

DN 135:317738

ED Entered STN: 19 Jul 2001

TI Editorial to nutrition research reviews

AU Forbes, J. M.

CS Nutrition Research Reviews, UK

SO Nutrition Research Reviews (2001), 14(1), 1-2

CODEN: NREREX; ISSN: 0954-4224

PB CABI Publishing

DT Journal; General Review  
LA English  
CC 18-0 (Animal Nutrition)  
AB An editorial review with 10 refs. A brief outline of the 7 review papers published in this issue is provided. The reviews cover the topics of **blood pressure** regulation and dietary micronutrient vitamin and mineral intakes, biotin metabolism and cell cycle regulation, endogenous cannabinoids role in appetite regulation, nutrition during space flights, dietary Ca intake role in bone health in children and adolescents, nutritional significance of **conjugated linoleic acid**, and anti-adipogenic properties of **conjugated linoleic acid**.  
ST review nutrition  
IT Nutrition, animal  
(nutrition research editorial review)  
RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD  
RE  
(1) Dakshinamurti, K; Nutrition Research Reviews 2001, V14, P3 HCAPLUS  
(2) Grizard, J; Nutrition Research Reviews 1995, V8, P67 HCAPLUS  
(3) Kirkham, T; Nutrition Research Reviews 2001, V14, P65 HCAPLUS  
(4) Kun, Z; Nutrition Research Reviews 2001, V14, P119 HCAPLUS  
(5) Lawson, R; Nutrition Research Reviews 2001, V14, P153 HCAPLUS  
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(7) Millward, D; Nutrition Research Reviews 1996, V9, P67  
(8) Roche, H; Nutrition Research Reviews 2001, V14, P173 HCAPLUS  
(9) Stein, T; Nutrition Research Reviews 2001, V14, P87 HCAPLUS  
(10) Zemleni, J; Nutrition Research Reviews 2001, V14, P45 HCAPLUS  
  
L66 ANSWER 23 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN  
AN 2001:296192 HCAPLUS  
DN 134:325639  
ED Entered STN: 26 Apr 2001  
TI Bioactive substances in milk with properties decreasing risk of cardiovascular diseases  
AU Pfeuffer, Maria; Schrezenmeir, J.  
CS Department of Physiology and Biochemistry of Nutrition, Federal Dairy Research Centre, Kiel, 24103, Germany  
SO British Journal of Nutrition (2000), 84(Suppl. 1), S155-S159  
CODEN: BJNUAV; ISSN: 0007-1145  
PB CABI Publishing  
DT Journal; General Review  
LA English  
CC 18-0 (Animal Nutrition)  
Section cross-reference(s): 14  
AB A review with 47 refs. Milk is often seen as a potential promoter of atherosclerosis and coronary heart disease because it is a source of cholesterol and saturated fatty acids. But there are several studies indicating that milk and milk products may not affect adversely blood lipids as would be predicted from its fat content and fat composition. There are even factors in milk and milk products which may actively protect from this condition by improving several risk factors. Calcium, bioactive peptides and as yet unidentified components in whole milk may protect from **hypertension**, and folic acid, vitamin B6 (pyridoxine) and B12 (cyanocobalamin) or other unidentified components of skim milk may contribute to low homocysteine levels. **Conjugated linoleic acid** may have hypolipidemic and antioxidative and thus antiatherosclerotic properties. Epidemiol. studies suggest that milk and milk products fit well into a healthy eating pattern emphasizing cereals and vegetables.  
ST review milk coronary heart disease risk redn

- IT Antiarteriosclerotics  
(antiatherosclerotics; bioactive substances in milk with properties decreasing risk of cardiovascular diseases)
- IT **Hypertension**  
Milk  
(bioactive substances in milk with properties decreasing risk of cardiovascular diseases)
- IT Artery, disease  
(coronary; bioactive substances in milk with properties decreasing risk of cardiovascular diseases)
- IT Cardiovascular system  
(disease; bioactive substances in milk with properties decreasing risk of cardiovascular diseases)
- IT Fats and Glyceridic oils, biological studies  
RL: BOC (Biological occurrence); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence); PROC (Process)  
(milk; bioactive substances in milk with properties decreasing risk of cardiovascular diseases)
- IT 7440-70-2, Calcium, biological studies **121250-47-3, Conjugated linoleic acid**  
RL: BOC (Biological occurrence); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence); PROC (Process)  
(bioactive substances in milk with properties decreasing risk of cardiovascular diseases)

RE.CNT 47 THERE ARE 47 CITED REFERENCES AVAILABLE FOR THIS RECORD  
RE

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- (2) Agerbaek, M; European Journal of Clinical Nutrition 1995, V49, P346 MEDLINE
- (3) Appel, L; New England Journal of Medicine 1997, V336, P1117 MEDLINE
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- (9) Buonopane, G; Journal of the American College of Nutrition 1992, V11, P56 MEDLINE
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- (17) Ha, Y; Cancer Research 1990, V50, P1097 HCAPLUS
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 IT **121250-47-3, Conjugated linoleic acid**  
 RL: BOC (Biological occurrence); BPR (Biological process); BSU (Biological  
 study, unclassified); BIOL (Biological study); OCCU (Occurrence); PROC  
 (Process)  
 (bioactive substances in milk with properties decreasing risk of  
 cardiovascular diseases)  
 RN 121250-47-3 HCAPLUS  
 CN Octadecadienoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 57-11-4

CMF C18 H36 O2

HO<sub>2</sub>C--(CH<sub>2</sub>)<sub>16</sub>--Me

L66 ANSWER 24 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN  
 AN **2000:772592** HCAPLUS  
 DN 133:309305  
 ED Entered STN: 03 Nov 2000  
 TI Conjugated fatty acid esters  
 IN Kudo, Satoshi; Mizusawa, Naomi; Hamura, Mahoko  
 PA Kabushiki Kaisha Yakult Honsha, Japan  
 SO PCT Int. Appl., 32 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA Japanese  
 IC ICM C07C0069-587  
 ICS A23D0009-00; A61K0031-201; A61K0009-48; A61K0009-20; A61P0003-04;  
 A61P0003-06; A23L0001-30  
 CC 17-6 (Food and Feed Chemistry)  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000064854	A1	20001102	WO 2000-JP2703	20000425
	W: AU, BR, CA, CN, JP, KR, US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	EP 1174416	A1	20020123	EP 2000-917463	20000425

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
IE, FI

US 2005165100	A1	20050728	US 2005-86870	20050321
PRAI JP 1999-120706	A	19990427		
WO 2000-JP2703	W	20000425		
US 2001-19834	B1	20011025		

## CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2000064854	ICM	C07C0069-587
	ICS	A23D0009-00; A61K0031-201; A61K0009-48; A61K0009-20; A61P0003-04; A61P0003-06; A23L0001-30
	IPCI	C07C0069-587 [ICM,7]; A23D0009-00 [ICS,7]; A61K0031-201 [ICS,7]; A61K0009-48 [ICS,7]; A61K0009-20 [ICS,7]; A61P0003-04 [ICS,7]; A61P0003-06 [ICS,7]; A23L0001-30 [ICS,7]
	ECLA	A23D009/00; A23L001/30C; A23L001/30C2; A61K031/231; A61K031/232; A61K047/14; A61K047/48H4; C07C069/587; C11C003/02
EP 1174416	IPCI	C07C0069-587 [ICM,6]; A23D0009-00 [ICS,6]; A61K0031-201 [ICS,6]; A61K0009-48 [ICS,6]; A61K0009-20 [ICS,6]; A61P0003-04 [ICS,6]; A61P0003-06 [ICS,6]; A23L0001-30 [ICS,6]
	ECLA	A23D009/00; A23L001/30C2; A61K031/231; A61K047/14; A61K047/48H4; C07C069/587; C11C003/02; C11C003/08
US 2005165100	IPCI	C07C0051-347 [ICM,7]; A61K0031-225 [ICS,7]
	NCL	514/547.000
	ECLA	A23D009/00; A23L001/30C; A23L001/30C2; A61K031/231; A61K031/232; A61K047/14; A61K047/48H4; C07C069/587; C11C003/02; C11C003/08

AB Use of conjugated fatty acid glycerides, which are formed by converting conjugated fatty acids having conjugated double bond(s) in the mol. into glycerol esters, is described to increase physiol. effects of the conjugated fatty acids, and to control the bitterness or astringency of the conjugated fatty acids, thereby making these compds. useful in health food preparation For example, glycerides having **conjugated linoleic acid** in the mol. improve lipid metabolism, preventing obesity and **hypertension**.

ST fatty acid ester health food bitterness

IT Bitterness

Health food

(conjugated fatty acid esters for controlling bitterness in health food)

IT **Hypertension**

(conjugated fatty acid esters for controlling **hypertension**)

IT Obesity

(conjugated fatty acid esters for controlling obesity)

IT Fatty acids, biological studies

RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)

(esters; conjugated fatty acid esters for controlling bitterness in health food)

RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

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- (4) Nitsusui Seiyaku K K; JP 840981 A 1996
- (5) Otsuka Pharmaceutical Co Ltd; JP 1179987 A
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(9) Wisconsin Alumni Research Foundation; JP 10508189 A 1998

L66 ANSWER 25 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2000:613544 HCAPLUS

DN 133:309388

ED Entered STN: 06 Sep 2000

TI Safety of **conjugated linoleic acid** (**CLA**) in overweight or obese human volunteers

AU Berven, Grethe; Bye, Amund; Hals, Ottar; Blankson, Henrietta; Fagertun, Hans; Thom, Erling; Wadstein, Jan; Gudmundsen, Ola

CS Scandinavian Clinical Research, Kjeller, N-2027, Norway

SO European Journal of Lipid Science and Technology (2000), 102(7), 455-462  
CODEN: EJLTFM; ISSN: 1438-7697

PB Wiley-VCH Verlag GmbH

DT Journal

LA English

CC 18-5 (Animal Nutrition)

AB The main objective of the study was to investigate the safety of **conjugated linoleic acid** (**CLA**) in healthy volunteers. The safety and effects of **CLA** on body composition were investigated in 60 overweight or obese humans with body mass index (BMI) 27.5-39.0 kg/m<sup>2</sup>. They were divided into 2 groups given 3.4 g **CLA** or placebo (4.5 g olive oil) daily for 12 wk. The safety was evaluated by anal. of blood hematol. and biochem. parameters and by clin. exams. at baseline and week 12. Vital signs and adverse events were checked at baseline and weeks 6 and week 12. Bio-Impedance Assessment was used for body composition measurements. Adverse events occurred in 10% subjects. No differences in adverse events or other safety parameters were found between the 2 treatment groups. Small changes in the biochem. safety data were not regarded as clin. significant. No clin. significant changes in vital signs were observed. In the **CLA** group, the mean body weight decreased by 1.1 kg, while the mean BMI decreased by 0.4 kg/m<sup>2</sup>. The overall treatment effect of **CLA** on body weight and BMI was not significant. There were no differences between the groups with regard to **CLA** efficacy parameters. Thus, **CLA** in the used dose is a safe substance in healthy humans with regard to the safety parameters investigated.

ST nutrition **conjugated linoleic acid** safety  
blood biochem index obesity

IT Lipoproteins

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(Lp(a); dietary **conjugated linoleic acid**

safety and effects on blood parameters and body weight in overweight or obese humans)

IT Blood

Blood cell

**Blood pressure**

Body weight

Nutrition, animal

Obesity

Safety

(dietary **conjugated linoleic acid** safety

and effects on blood parameters and body weight in overweight or obese humans)

IT Ferritins

Glycerides, biological studies

Hemoglobins

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL

(Biological study); PROC (Process)  
 (dietary **conjugated linoleic acid** safety  
 and effects on blood parameters and body weight in overweight or obese  
 humans)

IT Hemoglobins

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL  
 (Biological study); PROC (Process)  
 (glycohemoglobins; dietary **conjugated linoleic  
 acid** safety and effects on blood parameters and body weight in  
 overweight or obese humans)

IT **121250-47-3, Conjugated linoleic acid**

RL: ADV (Adverse effect, including toxicity); FFD (Food or feed use); BIOL  
 (Biological study); USES (Uses)  
 (dietary **conjugated linoleic acid** safety  
 and effects on blood parameters and body weight in overweight or obese  
 humans)

IT 57-88-5, Cholesterol, biological studies 60-27-5, Creatinine 635-65-4,  
 Bilirubin, biological studies 7440-09-7, Potassium, biological studies  
 7440-23-5, Sodium, biological studies 7440-70-2, Calcium, biological  
 studies 9000-86-6, Gpt 9000-97-9, Got 9001-15-4, Creatine  
 phosphokinase 9001-60-9 9001-62-1, Lipase 9046-27-9,  $\gamma$   
 Glutamyl transferase 16887-00-6, Chloride, biological studies  
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL  
 (Biological study); PROC (Process)  
 (dietary **conjugated linoleic acid** safety  
 and effects on blood parameters and body weight in overweight or obese  
 humans)

RE.CNT 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD  
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  - (25) Sugano, M; Lipids 1998, V33, P521 HCAPLUS
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- IT **121250-47-3, Conjugated linoleic acid**  
 RL: ADV (Adverse effect, including toxicity); FFD (Food or feed use); BIOL  
 (Biological study); USES (Uses)



(dietary **conjugated linoleic acid** safety  
and effects on blood parameters and body weight in overweight or obese  
humans)

RN 121250-47-3 HCAPLUS  
CN Octadecadienoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 57-11-4  
CMF C18 H36 O2

HO<sub>2</sub>C-(CH<sub>2</sub>)<sub>16</sub>-Me

=> => d 144 bib abs hitstr retable tot

L44 ANSWER 1 OF 11 HCAPLUS COPYRIGHT 2006 ACS on STN  
AN 2003:329203 HCAPLUS  
DN 139:333040

TI Chitosan conjugated **CLA** gel for treatment of stable chronic  
psoriasis vulgaris

AU Lassus, Allan; **Wadstein, Jan**; Thom, Erling

CS Helsinki Research Centre, Helsinki, Finland

SO Journal of Applied Cosmetology (2002), 20(4), 219-225

CODEN: JACOEL; ISSN: 0392-8543

PB International Ediemme

DT Journal

LA English

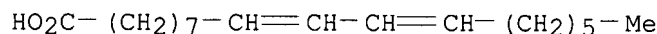
AB A new gel containing **Conjugated Linoleic Acid** (**CLA**) used in adult patients with chronic stable psoriasis vulgaris, showed promising therapeutic results. The duration of the study was 4 wk. Forty patients were included; 20 received in a randomized manner treatment with the new gel and 20 got placebo. The study was carried out as a double blind trial. Thirty-eight patients concluded the study according to the protocol. The two withdrawals were in the placebo group and were due to deterioration of the disease. The treatment with the **CLA** gave significant improvements in the psoriasis disease while the results in the placebo group were not significant. The results were judged through clin. evaluation by the investigator (AL) as well as with objective measurements using Dermascan C. A significant correlation between the subjective clin. evaluation and the objective measurements is observed. The tolerability was good in both groups. However, several patients in both groups were of the opinion that the vehicle had a drying effect on the skin. Based on these observations it is recommended that the present vehicle should be changed in order to avoid the drying effect on the skin.

IT **1839-11-8D**, 9,11-Octadecadienoic acid,  
**conjugates** with Chitoclear 400

RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(chitosan **conjugated linoleic acid** (**CLA**) gel for treatment of stable chronic psoriasis vulgaris)

RN 1839-11-8 HCAPLUS

CN 9,11-Octadecadienoic acid (6CI, 8CI, 9CI) (CA INDEX NAME)



## RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Lassus, A	2000			An unpublished pilot	
Pitterman, W	1997			Chitin Handbook	
Thom, E	2001	119	51	J Appl Cosmetol	

L44 ANSWER 2 OF 11 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2002:695819 HCAPLUS

DN 137:222086

TI Compositions comprising an o/w emulsion containing **conjugated linoleic acid**IN **Remmereit, Jan**; Klaveness, Jo

PA Natural Asa, Norway; Cockbain, Julian

SO PCT Int. Appl., 29 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002070014	A1	20020912	WO 2002-GB996	20020307
	WO 2002070014	C1	20031127		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	CA 2455226	AA	20020912	CA 2002-2455226	20020307
	EP 1372728	A1	20040102	EP 2002-704908	20020307
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	US 2004077724	A1	20040422	US 2003-471049	20031222
PRAI	GB 2001-5622	A	20010307		
	WO 2002-GB996	W	20020307		

AB The present invention provides a method of treatment of a human or non-human (e.g. mammalian, avian or reptilian) animal subject by the parenteral administration of a lipophilic pharmaceutical agent, the improvement comprising administering said pharmaceutical agent in an oil-in-water emulsion containing a **conjugated linoleic acid (CLA)** or a physiologically tolerable derivative thereof. A mixture of 10 g **CLA** triglyceride (produced by reacting **CLA** with glycerol), 1.0 g purified egg phospholipid, 50 mg sodium stearate and 5 g  $\alpha$ -tocopherol was finely dispersed. A mixture of 100 mL water containing 2.5 g glycerol and 0.05 mmol NaOH was added to the **CLA** mixture during stirring at room temperature. The mixture was homogenized in a

high pressure homogenator and the final emulsion filled into vials and heat-sterilized.

IT **60-33-3D, Linoleic acid, conjugates**

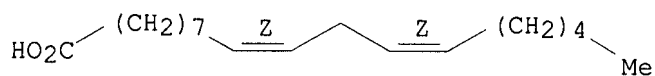
**2420-56-6D, conjugates 2540-56-9D,  
conjugates**

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(comps. comprising o/w emulsion containing **conjugated  
linoleic acid**)

RN 60-33-3 HCAPLUS

CN 9,12-Octadecadienoic acid (9Z,12Z)- (9CI) (CA INDEX NAME)

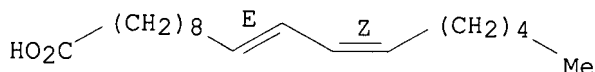
Double bond geometry as shown.



RN 2420-56-6 HCAPLUS

CN 10,12-Octadecadienoic acid, (10E,12Z)- (9CI) (CA INDEX NAME)

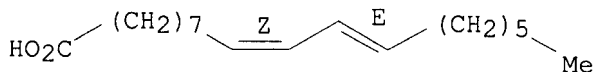
Double bond geometry as shown.



RN 2540-56-9 HCAPLUS

CN 9,11-Octadecadienoic acid, (9Z,11E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



## RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Conlinco Inc	1999			EP 0954975 A	HCAPLUS
Cook, M	1998			US 5760083 A	HCAPLUS
Coury, W	2000			WO 0000186 A	HCAPLUS
Gervais Danone Co	2000			FR 2784268 A	HCAPLUS
James, N	1999			US 5885594 A	HCAPLUS
Kritchevsky, D	2000			WO 0009118 A	HCAPLUS
Lee, K	1998			US 5837733 A	HCAPLUS
Otsuka Pharma Co Ltd	2000			EP 1010424 A	HCAPLUS
Remmereit, J	2000			US 6019990 A	HCAPLUS
Tufts College	2000			WO 0067596 A	HCAPLUS
Unilever Plc	2001			WO 0108650 A	HCAPLUS
Unilever Plc	2001			WO 0108652 A	HCAPLUS
Univ South Dakota	1999			WO 9908540 A	HCAPLUS
Wisconsin Alumni Res Fo	1996			WO 9606605 A	HCAPLUS
Wisconsin Alumni Res Fo	1997			WO 9746118 A	HCAPLUS

L44 ANSWER 3 OF 11 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2002:655079 HCAPLUS

DN 137:179896

TI **Conjugated linoleic acid** in treatment and  
prophylaxis of diabetes

IN **Remmereit, Jan; Wadstein, Jan;** Klaveness, Jo  
 PA Natural Corporation, Norway  
 SO U.S., 8 pp.  
 CODEN: USXXAM  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6440931	B1	20020827	US 2000-510059	20000222
PRAI	US 1999-121232P	P	19990223		

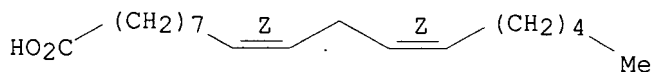
AB The invention provides method of treatment and prophylaxis of both insulin- (Type I) and non-insulin-dependent (type II) diabetes mellitus, by administration of **conjugated linoleic acid (CLA)** in the form of pure isomers, selected isomer mixts. or non-selected isomer mixts. The **conjugated linoleic acids** may be administered alone, or in combination with other diabetes therapeutic regimes.

IT **60-33-3**, 9,12-Octadecadienoic acid (9Z,12Z)-, biological studies  
 RL: BSU (Biological study, unclassified); BIOL (Biological study) (**conjugated linoleic acid** in treatment and prophylaxis of diabetes)

RN 60-33-3 HCAPLUS

CN 9,12-Octadecadienoic acid (9Z,12Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



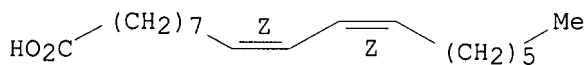
IT **544-70-7**, 9-cis,11-cis-Octadecadienoic acid  
**544-71-8**, 9-trans,11-trans-Octadecadienoic acid  
**1072-36-2**, 10-trans,12-trans-Octadecadienoic acid  
**2420-56-6**, 10-trans,12-cis-Octadecadienoic acid  
**2540-56-9**, 9-cis,11-trans-Octadecadienoic acid  
**7307-45-1**, 10-cis,12-cis-Octadecadienoic acid

RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (**conjugated linoleic acid** in treatment and prophylaxis of diabetes)

RN 544-70-7 HCAPLUS

CN 9,11-Octadecadienoic acid, (9Z,11Z)- (9CI) (CA INDEX NAME)

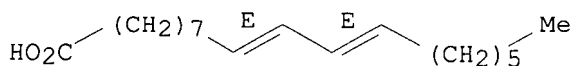
Double bond geometry as shown.



RN 544-71-8 HCAPLUS

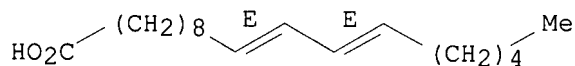
CN 9,11-Octadecadienoic acid, (9E,11E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



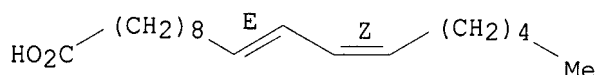
RN 1072-36-2 HCAPLUS  
 CN 10,12-Octadecadienoic acid, (10E,12E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



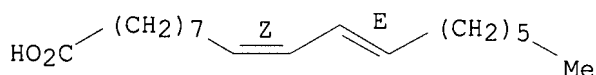
RN 2420-56-6 HCAPLUS  
 CN 10,12-Octadecadienoic acid, (10E,12Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



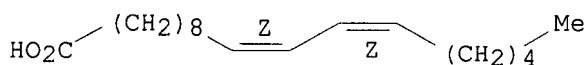
RN 2540-56-9 HCAPLUS  
 CN 9,11-Octadecadienoic acid, (9Z,11E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 7307-45-1 HCAPLUS  
 CN 10,12-Octadecadienoic acid, (10Z,12Z)- (9CI) (CA INDEX NAME)

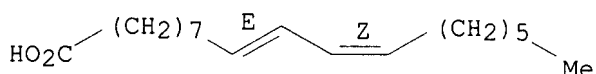
Double bond geometry as shown.



IT 872-23-1 2420-44-2 121250-47-3,  
**Conjugated linoleic acid 121250-47-3D**  
 , Octadecadienoic acid, esters  
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL  
 (Biological study); USES (Uses)  
 (conjugated linoleic acid in treatment  
 and prophylaxis of diabetes)

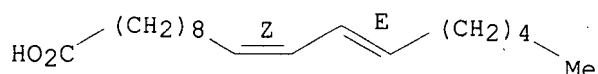
RN 872-23-1 HCAPLUS  
 CN 9,11-Octadecadienoic acid, (9E,11Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 2420-44-2 HCAPLUS  
 CN 10,12-Octadecadienoic acid, (10Z,12E)- (9CI) (CA INDEX NAME)

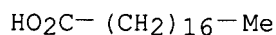
Double bond geometry as shown.



RN 121250-47-3 HCAPLUS  
 CN Octadecadienoic acid (9CI) (CA INDEX NAME)

CM 1

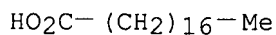
CRN 57-11-4  
 CMF C18 H36 O2



RN 121250-47-3 HCAPLUS  
 CN Octadecadienoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 57-11-4  
 CMF C18 H36 O2



# RETABLE

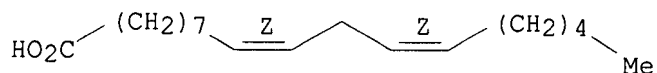
Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
=====	=====	=====	=====	=====	=====
Anon	1999			WO 9929317	HCAPLUS
Belury	1995	53	83	Nut Rev	
Berdeaux	1997	74	1011	JAOCS	HCAPLUS
Cesano	1998	18	1429	Anticancer Res	HCAPLUS
Chin	1992	5	185	J Food Comp Anal	HCAPLUS
Cook	1995			US 5428072 A	HCAPLUS
Cook	1995			US 5430066 A	HCAPLUS
Cook	1996			US 5554646 A	HCAPLUS
Cook	1996			US 5585400 A	HCAPLUS
Cook	1998	8	459	International Dairy	HCAPLUS
Cowen	1950	72	492	JAOCS	
Durgam	1997	116	121	Cancer Lett	HCAPLUS
Gabbay	1976	295	443	N Engl J Med	MEDLINE
Gumbirer	1998	21	9	Diabetes Care	
Horrobin	1987			US 4681896 A	HCAPLUS
Horrobin	1989			US 4806569 A	HCAPLUS
Horrobin	1989			US 4868212 A	HCAPLUS
Houseknecht	1998	244	678	Biochem, Biophys Res	HCAPLUS
Houseknecht	1998	244	678	Biochemical and Biop	HCAPLUS
Ip	1997	18	755	Carcinogenesis	HCAPLUS
Iwamura	1984			US 4472432 A	HCAPLUS
Jerome	2000			US 6060514 A	HCAPLUS
Jie, L	1997	32	1019	Lipids	
Koenig	1976	295	417	N Engl J Med	MEDLINE
Lee	1994	108	19	Atherosclerosis	HCAPLUS
Leonhardt	1996	254	173	Clin Chim Acta	

Liu	1997	32	725	Lipids	HCAPLUS
Remmereit	2000			US 6034132 A	HCAPLUS
Remmereit	2000			US 6042869 A	HCAPLUS
Rubin	1991			US 5034415 A	HCAPLUS
Saebo	2000			US 6015833 A	HCAPLUS
Santini	1997	46	1853	Diabetes	HCAPLUS
Schwertner	1996			US 5496735 A	HCAPLUS
Sebedio	1999	2	499	Current Opinion in C	HCAPLUS
Stewart	1989			US 4826877 A	HCAPLUS
Thompson	1997	57	5067	Cancer Res	HCAPLUS
West	1998	275	R667	Am J Physiol	HCAPLUS
Wong	1997	17	987	Anticancer Res	HCAPLUS

L44 ANSWER 4 OF 11 HCAPLUS COPYRIGHT 2006 ACS on STN  
 AN 2002:368286 HCAPLUS  
 DN 136:374550  
 TI A skin cream composition containing chitosan conjugates  
 IN **Wadstein, Jan**  
 PA Wadlund AS, Norway  
 SO PCT Int. Appl., 27 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002038123	A1	20020516	WO 2001-NO437	20011101
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	NO 310176	B1	20010605	NO 2000-5718	20001113
	AU 2002016473	A5	20020521	AU 2002-16473	20011101
	EP 1341517	A1	20030910	EP 2001-993455	20011101
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	US 2004043963	A1	20040304	US 2003-416671	20030922
PRAI	NO 2000-5718	A	20001113		
	WO 2001-NO437	W	20011101		
AB	The present invention is related to compns. containing chitosan <b>conjugated CLA (conjugated linoleic acid)</b> and a chitosan <b>conjugated</b> Vitamin A or a $\beta$ -cyclodextrin <b>conjugated</b> vitamin A. The invention also concerns the preparation of the compns. The compns. according to the invention can be used as topical and cosmetic compns. as well as pharmaceutical compns. for treatment of atypical dermatitis, psoriasis eczema as well as eczema of different origins and solar dermatitis.				
IT	<b>60-33-3D, Linoleic acid, conjugates</b> with chitosan				
	RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (skin cream composition containing chitosan <b>conjugates</b> )				
RN	60-33-3 HCAPLUS				
CN	9,12-Octadecadienoic acid (9Z,12Z)- (9CI) (CA INDEX NAME)				

Double bond geometry as shown.



IT **2420-56-6**, 10,12-Octadecadienoic acid, (10E,12Z)-

**2540-56-9**, 9-cis-11-trans-**Linoleic acid**

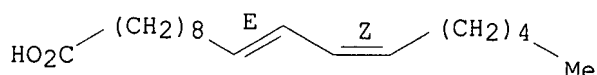
RL: COS (Cosmetic use); MOA (Modifier or additive use); BIOL (Biological study); USES (Uses)

(skin cream composition containing chitosan **conjugates**)

RN 2420-56-6 HCAPLUS

CN 10,12-Octadecadienoic acid, (10E,12Z)- (9CI) (CA INDEX NAME)

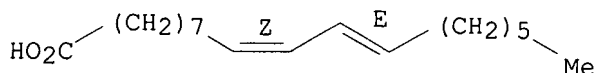
Double bond geometry as shown.



RN 2540-56-9 HCAPLUS

CN 9,11-Octadecadienoic acid, (9Z,11E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



#### RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Collagen Corporation	1995			EP 0637450 A2	HCAPLUS
DCV Inc	1999			WO 9932105 A1	HCAPLUS
Leuba	1991			US 5057542 A	HCAPLUS
Natural Nutrition Ltd	1999			WO 9926588 A2	HCAPLUS
Roussell-Uclaf	1991			EP 0414608 A1	HCAPLUS
Thom, E	2001	19	51	J Appl Cosmetol	HCAPLUS
Unilever Nv	2000			WO 0037040 A1	HCAPLUS
Unilever Plc	2000			WO 0037039 A1	HCAPLUS
Unilever Plc	2001			WO 0108650 A1	HCAPLUS
Volden, G	1998			WO 9833476 A1	HCAPLUS
Wadlund As	2001			NO 310176 B1	HCAPLUS
Wadstein, J	1994			WO 9421225 A1	HCAPLUS
Wadstein, J	1999			WO 9949840 A1	HCAPLUS

L44 ANSWER 5 OF 11 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2001:888071 HCAPLUS

DN 136:183105

TI **Conjugated linoleic acid** reduces body fat in healthy exercising humans

AU Thom, E.; **Wadstein, J.**; Gudmundsen, O.

CS Parexel Norway AS, Lillestrom, 2001, Norway

SO Journal of International Medical Research (2001), 29(5), 392-396

CODEN: JIMRBV; ISSN: 0300-0605

PB Cambridge Medical Publications Ltd.



DT Journal  
 LA English  
 AB This study was designed to investigate the efficacy and tolerability of daily **conjugated linoleic acid (CLA)** in healthy exercising humans. This was a randomized, double-blind, placebo-controlled study in 20 healthy humans of normal body weight and body mass index less than 25.0 kg/m<sup>2</sup>, who did standardized phys. exercise in a gym for 90 min three times weekly. Participants took either placebo (hydrogel) or **CLA** 0.6 mg, three times daily, as two capsules during meals, for 12 wk. Body fat, measured using near IR light, was significantly reduced in the **CLA** group during the study, but not in the placebo group. No effects on body weight were observed Tolerability was good and similar in the two groups. Compliance, as judged by the number of returned capsules, was more than 80% of the recommended dose for all participants. Thus **CLA** reduces body fat but not body weight in healthy exercising humans of normal body weight

IT **121250-47-3, Conjugated linoleic acid**  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (conjugated linoleic acid reduces body fat in healthy exercising humans)

RN 121250-47-3 HCAPLUS  
 CN Octadecadienoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 57-11-4  
 CMF C18 H36 O2

HO<sub>2</sub>C-(CH<sub>2</sub>)<sub>16</sub>-Me

# RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Atkinson, R	1999	1	328	Advances in Conjugat	
Azain, M	2000	130	1548	J Nutr	HCAPLUS
Berven, G	2000	102	455	Eur J Lipid Sci Tech	HCAPLUS
Blankson, H	2000	130	2943	J Nutr	HCAPLUS
Cassady, S	1996	7	8	Cardiopulm Phys Ther	
Conway, J	1984	40	1123	Am J Clin Nutr	MEDLINE
Dugan, M	1997	77	723	Can J Anim Sci	HCAPLUS
Ferreira, M	1997	11	280	J Strength Cond Res	
Gavino, V	2000	130	27	J Nutr	HCAPLUS
Lowery, L	1998	30	S182	Med Sci Sports Exerc	
Ostrowska, E	1999	129	2037	J Nutr	HCAPLUS
Pariza, M	1996	96	A3227	Exp Biol	
Park, Y	1997	32	853	Lipids	HCAPLUS
Park, Y	1999	34	243	Lipids	HCAPLUS
Tsuboyama-Kasaoka, N	2000	49	1534S	Diabetes	
Vessby, B	1999	101	AT2	Chem Phys Lipids	
West, D	1998	275	R667	Am J Physiol	HCAPLUS
Zambell, K	2000	35	777	Lipids	HCAPLUS

L44 ANSWER 6 OF 11 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2001:584837 HCAPLUS

DN 136:221495

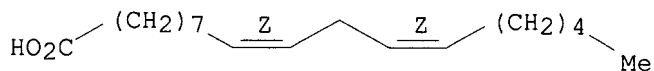
TI The effect of a new skin ointment on skin thickness and elasticity

AU Thom, E.; Gudmundsen, O.; **Wadstein, J.**  
 CS Parexel Norway AS, Lillestrom, Norway  
 SO Journal of Applied Cosmetology (2001), 19(2), 51-57  
 CODEN: JACOEL; ISSN: 0392-8543  
 PB International Ediemme  
 DT Journal  
 LA English  
 AB The present open pilot study was carried out in order to investigate a new patented concept for skin treatment. The new concept is intended for use in treatment of ageing skin. The ointment contains **conjugated linoleic acid (CLA)** and retinyl palmitate (RP). Both ingredients are conjugated with the biopolymer chitosan in order to improve water solubility, increase skin penetration and inhibit oxidation

of the active substances. A number of studies have previously been carried out with conjugated retinyl palmitate, where the conjugation mostly has been done using  $\beta$ -cyclodextrin. We included 20 females in our study and the treatment period was three months. Objective measurements of skin-thickness and elasticity were carried out initially and after three months. Subjective observations and scores were performed by the participants themselves using visual analog scales (VASs) initially and at the end of the study. The results showed a significant improvement in skin quality both with regard to objective as well as in subjective parameters after treatment with the new ointment. In comparison to our previous studies with ointments containing only conjugated RP the effects on skin thickness and elasticity were more pronounced with the new formulation showing an average improvement in skin thickness of 51% and in skin elasticity of 27%. The self evaluation scores of the participants were also highly favorable and significant, and all of the participants would like to continue with the ointment after the formal study was closed. The tolerability of the treatment was excellent and all subjects concluded the study according to the protocol.

IT **60-33-3DP, Linoleic acid, conjugates**  
 with chitosan  
 RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (effect of new skin ointment on skin thickness and elasticity)  
 RN 60-33-3 HCAPLUS  
 CN 9,12-Octadecadienoic acid (9Z,12Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



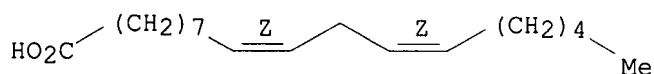
# RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Counts, D	1988	39	235	J Soc Cosmet Chem	HCAPLUS
Fthenakis, C	1991	42	211	J Sos Cosmet Chem	
Kim, S	1999			Proceedings 23 World	
Pitterman, W			361	Chitin Handbook	
Thom, E	1993	11	71	J Appl Cosmetology	
Thom, E	1994	12	45	J Appl Cosmetology	
Thom, E	1997	15	133	J Appl Cosmetology	HCAPLUS

L44 ANSWER 7 OF 11 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2000:906573 HCAPLUS  
 DN 134:146896  
 TI **Conjugated linoleic acid** reduces body fat mass in overweight and obese humans  
 AU Blankson, Henrietta; Stakkestad, Jacob A.; Fagertun, Hans; Thom, Erling; Wadstein, Jan; Gudmundsen, Ola  
 CS Scandinavian Clinical Research AS, Kjeller, N-2027, Norway  
 SO Journal of Nutrition (2000), 130(12), 2943-2948  
 CODEN: JONUAI; ISSN: 0022-3166  
 PB American Society for Nutritional Sciences  
 DT Journal  
 LA English  
 AB **Conjugated linoleic acid (CLA)** has been shown to reduce body fat mass (BFM) in animals. To investigate the dose-response relationships of **conjugated linoleic acid** with regard to BFM in humans, a randomized, double-blind study including 60 overweight or obese volunteers (body mass index 25-35 kg/m<sup>2</sup>) was performed. The subjects were divided into five groups receiving placebo (9 g olive oil), 1.7, 3.4, 5.1 or 6.8 g **conjugated linoleic acid** per day for 12 wk, resp. Dual-energy X-ray absorptiometry was used to measure body composition [measurements at wk 0 (baseline), 6 and 12]. Of the 60 subjects, 47 completed the study. Eight subjects withdrew from the study due to adverse events; however, no differences among treatment groups were found regarding adverse events. Repeated-measures anal. showed that a significantly higher reduction in BFM was found in the **conjugated linoleic acid** groups compared with the placebo group (P = 0.03). The reduction of body fat within the groups was significant for the 3.4 and 6.8 g **CLA** groups (P = 0.05 and P = 0.02, resp.). No significant differences among the groups were observed in lean body mass, body mass index, blood safety variables or blood lipids. The data suggest that **conjugated linoleic acid** may reduce BFM in humans and that no addnl. effect on BFM is achieved with doses > 3.4 g **CLA**/d.  
 IT 60-33-3, **Linoleic acid**, biological studies  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)  
     (**conjugated linoleic acid** effect on body fat mass in overweight and obese humans)  
 RN 60-33-3 HCAPLUS  
 CN 9,12-Octadecadienoic acid (9Z,12Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



# RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Atkinson, R	1999	1	328	Advances in Conjugat	
Chin, S	1994	124	2344	J Nutr	HCAPLUS
Doyle, E	1998	9	69	INFORM	
Dugan, M	1997	77	723	Can J Anim Sci	HCAPLUS
Ha, Y	1990	50	1097	Cancer Res	HCAPLUS
Ip, C	1991	51	6118	Cancer Res	HCAPLUS
Kepler, C	1970	245	3612	J Biol Chem	HCAPLUS

Kepler, C	1971	246	2765	J Biol Chem	HCAPLUS
Lee, K	1994	108	19	Atherosclerosis	HCAPLUS
Nicolosi, R	1993	88	2458	Circulation (suppl)	
Pariza, M	1996	10	A3227	FASEB J	
Pariza, M	1997	11	A139	FASEB J	
Park, Y	1995		A64-10	IFT Annual Meeting	
Park, Y	1997	32	853	Lipids	HCAPLUS
Park, Y	1999	34	235	Lipids	HCAPLUS
Park, Y	1999	34	243	Lipids	HCAPLUS
Vessby, B	1999	101	AT2./	Chem Phys Lipids	
World Health Organizati	1997			Report of a WHO Cons	

L44 ANSWER 8 OF 11 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2000:793054 HCAPLUS

TI Effects of **conjugated linoleic acid** (

**CLA**) on body fat mass in overweight or obese human volunteers: a double-blind, randomized placebo controlled study.

AU Blankson, Henrietta; Stakkestad, Jacob A.; Fagertun, Hans; Thom, Erling; Wadstein, Jan; Gudmundsen, Ola

CS Scandinavian Clinical Research AS, N-2027 Kjeller, Norway

SO Abstracts of Papers, 220th ACS National Meeting, Washington, DC, United States, August 20-24, 2000 (2000) AGFD-023  
CODEN: 69FZC3

PB American Chemical Society

DT Journal; Meeting Abstract

LA English

AB **CLA** is in widespread use in Norway, Sweden, and USA as a nutritional supplement. However, no controlled clin. trial has previously been performed assessing the efficiency of the product. The main objective of the study was to investigate the effect of different daily doses of **CLA** on body composition in healthy volunteers. We especially wanted to study if **CLA** could reduce body fat mass and increase lean body mass. The trial was designed as a randomized, double-blind study including 60 overweight or obese volunteers (body mass index (BMI) above 25 kg/m<sup>2</sup> and less than 35 kg/m<sup>2</sup>). The subjects were divided into five groups receiving placebo (9g olive oil), 1.7g, 3.4g, 5.1g or 6.8g **CLA** per day for 12 wk, resp., by a simple block randomization procedure. Dual-Energy X-ray Absorptiometry (DXA) was used to measure body composition (measurements at week 0, week 6 and week 12). ANOVA showed that a significantly higher reduction in body fat mass was found in the **CLA** groups compared with the placebo group (p=0.03). The reduction of body fat within the groups was significant for the 3.4g and 6.8g **CLA** groups (p=0.05 and p=0.02, resp.). Only the highest dose of **CLA** (6.8g) gave a significant increase in lean body mass (p=0.03). The four **CLA** groups exhibited an increase in lean body mass from week 0 to week 12; however, no statistically significant difference was observed between the groups. After 12 wk of treatment no significant changes in weight or body mass index (BMI) were seen in any group. No difference was found between the groups regarding safety laboratory parameters or blood lipids.

The frequency of adverse events during the trial was relatively high (60%), but no difference was found between the treatment groups. The data suggest that **CLA** may reduce body fat mass in humans. The dose-response relationship in the present study indicates that no addnl. effect on body fat mass is achieved with doses above 3.4g **CLA** per day.

L44 ANSWER 9 OF 11 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2000:613544 HCAPLUS

DN 133:309388

TI Safety of **conjugated linoleic acid** (**CLA**) in overweight or obese human volunteers

AU Berven, Grethe; Bye, Amund; Hals, Ottar; Blankson, Henrietta; Fagertun, Hans; Thom, Erling; **Wadstein, Jan**; Gudmundsen, Ola

CS Scandinavian Clinical Research, Kjeller, N-2027, Norway

SO European Journal of Lipid Science and Technology (2000), 102(7), 455-462  
CODEN: EJLTFM; ISSN: 1438-7697

PB Wiley-VCH Verlag GmbH

DT Journal

LA English

AB The main objective of the study was to investigate the safety of **conjugated linoleic acid** (**CLA**) in healthy volunteers. The safety and effects of **CLA** on body composition were investigated in 60 overweight or obese humans with body mass index (BMI) 27.5-39.0 kg/m<sup>2</sup>. They were divided into 2 groups given 3.4 g **CLA** or placebo (4.5 g olive oil) daily for 12 wk. The safety was evaluated by anal. of blood hematol. and biochem. parameters and by clin. exams. at baseline and week 12. Vital signs and adverse events were checked at baseline and weeks 6 and week 12. Bio-Impedance Assessment was used for body composition measurements. Adverse events occurred in 10% subjects. No differences in adverse events or other safety parameters were found between the 2 treatment groups. Small changes in the biochem. safety data were not regarded as clin. significant. No clin. significant changes in vital signs were observed. In the **CLA** group, the mean body weight decreased by 1.1 kg, while the mean BMI decreased by 0.4 kg/m<sup>2</sup>. The overall treatment effect of **CLA** on body weight and BMI was not significant. There were no differences between the groups with regard to **CLA** efficacy parameters. Thus, **CLA** in the used dose is a safe substance in healthy humans with regard to the safety parameters investigated.

IT **121250-47-3, Conjugated linoleic acid**  
RL: ADV (Adverse effect, including toxicity); FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
(dietary **conjugated linoleic acid** safety and effects on blood parameters and body weight in overweight or obese humans)

RN 121250-47-3 HCAPLUS

CN Octadecadienoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 57-11-4

CMF C18 H36 O2

HO<sub>2</sub>C-(CH<sub>2</sub>)<sub>16</sub>-Me

# RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Aitken, R	1966	62	989	Proc R Soc Med	
Atkinson, R	1999	1	348	Advances in conjugat	HCAPLUS
Bell, N	1998	52	856	Eur J Clin Nutr	MEDLINE
Belury, M	1997	32	199	Lipids	HCAPLUS
Belury, M	1997	1	58	Nutr Dis Update J	
Belury, M	1995	53	83	Nutr Rev	MEDLINE
Cook, M	1993	72	1301	Poult Sci	HCAPLUS
Doyle, E	1998	9	69	Inform	

Dugan, M	1997	77	723	Can J Anim Sci	HCAPLUS
Ferreira, M	1997	11	280	J Strength Condition	
Fritsche, J	1998	206	77	Z Lebensm Unters For	HCAPLUS
Ha, Y	1990	50	1097	Cancer Res	HCAPLUS
Ha, Y	1987	8	1881	Carcinogenesis	HCAPLUS
Ip, C	1994	54	1212	Cancer Res	HCAPLUS
Knekt, P	1996	73	687	Br J Cancer	MEDLINE
Lee, K	1994	108	19	Atherosclerosis	HCAPLUS
Liew, C	1995	16	3037	Carcinogenesis	HCAPLUS
Liu, K	1998	127	15	Cancer Lett	HCAPLUS
Lowery, L	1998	30	182	Med Sci Sports Exerc	
Miller, C	1994	198	1107	Biochem Biophys Res	HCAPLUS
Munday, J	1999	81	251	Br J Nutr	HCAPLUS
Nicolosi, R	1997	22	266	Artery	HCAPLUS
Park, Y	1997	32	853	Lipids	HCAPLUS
Scimeca, J	1998	36	391	Food Chem Toxicol	HCAPLUS
Sugano, M	1998	33	521	Lipids	HCAPLUS
Vessby, B	1999	101		Chem Phys Lipids	
West, D	1998	44	R667	Am J Physiol	

L44 ANSWER 10 OF 11 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2000:201065 HCAPLUS

DN 132:207242

TI Bulk animal feeds containing **conjugated linoleic acid**

IN Remmereit, Jan

PA Natural Nutrition Ltd., Norway

SO U.S., 9 pp.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	US 6042869	A	20000328	US 1998-27075	19980220
	US 6203843	B1	20010320	US 2000-506128	20000217
	US 2001026832	A1	20011004	US 2000-742995	20001220
	US 6344230	B2	20020205		
	US 2002090443	A1	20020711	US 2001-36059	20011019
	US 6432469	B1	20020813		
PRAI	US 1998-27075	A1	19980220		
	US 2000-506128	A1	20000217		
	US 2000-742995	A1	20001220		

AB A **conjugated linoleic acid (CLA)**

is prepared on industrial scale as a hydrolyzed isomerized product for blending into bulk domestic animal feeds. The **CLA**-containing isomerized hydrolyzed oil from sunflower and safflower seeds has sufficiently low levels of phosphatides and sterols to permit crude processing and incorporation into feeds of an undried, undistd. oil fraction without toxic or unpalatable effects.

IT 544-70-7, 9,11-Octadecadienoic **acid** (9Z,11Z)-

544-71-8, 9,11-Octadecadienoic **acid** (9E,11E)-

872-23-1, 9,11-Octadecadienoic **acid** (9E,11Z)-

1072-36-2, 10,12-Octadecadienoic **acid** (10E,12E)-

2420-44-2, 10,12-Octadecadienoic **acid** (10Z,12E)-

2420-56-6, 10,12-Octadecadienoic **acid** (10E,12Z)-

2540-56-9, 9,11-Octadecadienoic **acid** (9Z,11E)-

7307-45-1, 10,12-Octadecadienoic **acid** (10Z,12Z)-

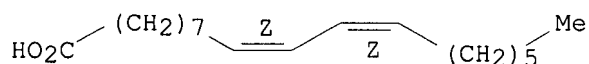
RL: AGR (Agricultural use); BOC (Biological occurrence); BSU (Biological study, unclassified); FFD (Food or feed use); BIOL (Biological study);

OCCU (Occurrence); USES (Uses)  
 (bulk animal feeds containing **conjugated linoleic acid**)

RN 544-70-7 HCAPLUS

CN 9,11-Octadecadienoic acid, (9Z,11Z)- (9CI) (CA INDEX NAME)

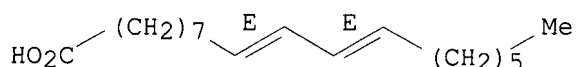
Double bond geometry as shown.



RN 544-71-8 HCAPLUS

CN 9,11-Octadecadienoic acid, (9E,11E)- (9CI) (CA INDEX NAME)

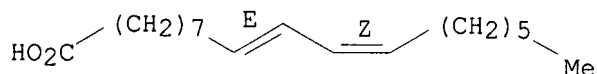
Double bond geometry as shown.



RN 872-23-1 HCAPLUS

CN 9,11-Octadecadienoic acid, (9E,11Z)- (9CI) (CA INDEX NAME)

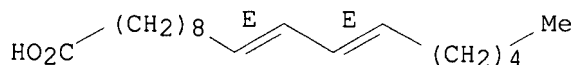
Double bond geometry as shown.



RN 1072-36-2 HCAPLUS

CN 10,12-Octadecadienoic acid, (10E,12E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 2420-44-2 HCAPLUS

CN 10,12-Octadecadienoic acid, (10Z,12E)- (9CI) (CA INDEX NAME)

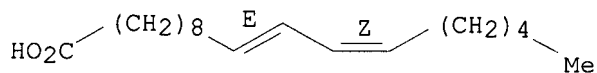
Double bond geometry as shown.



RN 2420-56-6 HCAPLUS

CN 10,12-Octadecadienoic acid, (10E,12Z)- (9CI) (CA INDEX NAME)

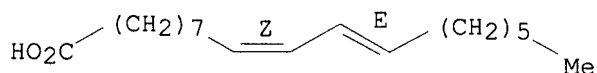
Double bond geometry as shown.



RN 2540-56-9 HCAPLUS

CN 9,11-Octadecadienoic acid, (9Z,11E)- (9CI) (CA INDEX NAME)

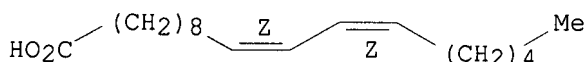
Double bond geometry as shown.



RN 7307-45-1 HCAPLUS

CN 10,12-Octadecadienoic acid, (10Z,12Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



IT 60-33-3D, Linoleic acid, conjugated

derivs.

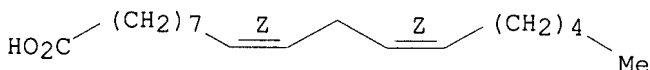
RL: AGR (Agricultural use); FFD (Food or feed use); BIOL (Biological study); USES (Uses)

(bulk animal feeds containing **conjugated linoleic acid**)

RN 60-33-3 HCAPLUS

CN 9,12-Octadecadienoic acid (9Z,12Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



## RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
=====	=====	=====	=====	=====	=====
Anon	1994			GB 558881	HCAPLUS
Baltes	1964			US 3162658	
Belury, M	1995	53	83	Nut Rev	
Braae, B	1976	53	353	JAOCs	HCAPLUS
Bradley	1944			US 2350583	HCAPLUS
Bradley, T	1942	34	237	Ind Eng Chem	
Brady	1987			US 4678580	HCAPLUS
Burkhardt, H	1970	47	69	JAOCs	HCAPLUS
Burkhardt, H	1971	48	697	JAOCs	HCAPLUS
Burr	1941			US 2242230	HCAPLUS
Chin, S	1992	5	185	J Food Comp Anal	HCAPLUS
Christie, W	1997	74	1231	JAOCs	
Clement, I	1997	66	1523S	Am J Clin Nutr	
Cook	1995			US 5428072	HCAPLUS
Cook	1995			US 5430066	HCAPLUS
Cook	1996			US 5554646	HCAPLUS
Cook	1996			US 5585400	HCAPLUS
Cook	1997			US 5674901	HCAPLUS
Cook	1998			US 5725873	HCAPLUS
Cowan, J	1950		492	JOACS	HCAPLUS
Emken	1973			US 3729379	HCAPLUS



Ensminger, M	1990	507	394	Feeds & Nutrition Di	
Holman, R	1991	88	4830	PNAS	HCAPLUS
Howell	1994			US 5286399	HCAPLUS
Itoh, T	1973	50	122	JAOCs	HCAPLUS
Jie, L	1997	32	1019	Lipids	
Jie, L	1997	32	1041	Lipids	
Krajca	1979			US 4164505	HCAPLUS
Lawate	1998			US 5773391	HCAPLUS
Mauter	1972			US 3650677	HCAPLUS
Mehta	1979			US 4179454	HCAPLUS
Pariza	1991			US 5017614	HCAPLUS
Pariza	1991			US 5070104	HCAPLUS
Pariza	1993			US 5208356	HCAPLUS
Park, Y	1997	32	853	Lipids	HCAPLUS
Radlove, S	1946	38	997	Ind Eng Chem	
Rathjen	1966			US 3278567	HCAPLUS
Sebedio, J	1997	1345	5	Biochem Biophys Acta	HCAPLUS
Sebedio, J	1988	65	362	JAOCs	HCAPLUS
Sehat, N	1998	33	217	Lipids	HCAPLUS
Smiles, A	1988	65	1151	JAOCs	HCAPLUS
Struve	1983			US 4381264	HCAPLUS
Willett, W	1994	84	722	Am J Public Health	MEDLINE

L44 ANSWER 11 OF 11 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 1999:355711 HCAPLUS

DN 131:23254

TI **Conjugated linoleic acid** delivery system in  
cosmetic preparationsIN **Remmereit, Jan**PA **Natural Nutrition Ltd. A/S, Norway**

SO PCT Int. Appl., 21 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9926588	A2	19990603	WO 1998-IB1998	19981120
	WO 9926588	A3	19990722		
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	RW:	GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
	US 6019990	A	20000201	US 1997-975748	19971121
	JP 11209279	A2	19990803	JP 1998-550	19980105
	JP 2002234838	A2	20020823	JP 2002-35933	19980105
	CA 2229624	C	20020709	CA 1998-2229624	19980213
	CA 2229624	AA	19990705		
	US 6034132	A	20000307	US 1998-44289	19980319
	AU 9913478	A1	19990615	AU 1999-13478	19981120
	EP 1032363	A2	20000906	EP 1998-957060	19981120
	EP 1032363	B1	20030205		
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	AT 232084	E	20030215	AT 1998-957060	19981120
	ES 2191979	T3	20030916	ES 1998-957060	19981120

JP 2004339240 A2 20041202 JP 2004-256354 20040902  
 PRAI US 1997-975748 A 19971121  
 JP 1998-550 A3 19980105  
 JP 2002-35933 A3 19980105  
 WO 1998-IB1998 W 19981120

AB The invention provides new cosmetic formulations containing free and derivatized forms of **conjugated linoleic acid**. These ingredients have beneficial effects related to their medicinal and nutritional properties, but are also engineered for their compatibility with standard cosmetic ingredients. Certain vitamin/**conjugated linoleic acid** combinational mols. are described which deliver equimolar amts. of both free components to viable layers of the epidermis, thereby obtaining multiple functionality of the final product. A sunscreen lotion contained capric/caprylic triglyceride 12, mineral oil 66, PEG dilaurate 6, **conjugated linoleic acid** (70 %) 11, linoleyl linoleate 3, retinoyl ascorbate 1, stearyl PABA 0.5, and titania 0.5 %.

IT 2420-56-6 2540-56-9 121250-47-3,

**Conjugated linoleic acid**

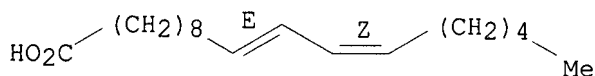
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(**conjugated linoleic acid** delivery system in cosmetic prepns.)

RN 2420-56-6 HCAPLUS

CN 10,12-Octadecadienoic acid, (10E,12Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 2540-56-9 HCAPLUS

CN 9,11-Octadecadienoic acid, (9Z,11E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



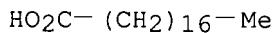
RN 121250-47-3 HCAPLUS

CN Octadecadienoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 57-11-4

CMF C18 H36 O2



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<http://scientific.thomson.com/support/patents/coverage/latestupdates/>

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[http://www.stn-international.de/stndatabases/details/ipc\\_reform.html](http://www.stn-international.de/stndatabases/details/ipc_reform.html) and  
<http://scientific.thomson.com/media/scpdf/ipcrdwpi.pdf> <<<  
 'BI ABEX' IS DEFAULT SEARCH FIELD FOR 'WPIX' FILE

=> d all abeq tech abex tot

L99 ANSWER 1 OF 3 WPIX COPYRIGHT 2006 THE THOMSON CORP on STN

AN 1997-311109 [29] WPIX

DNC C1997-100148

TI Health-care, diet, nutrient food production.

DC D13

IN JIN, L; WANG, J; ZHONG, Y

PA (BEIJ-N) BEIJING NUTRIENT SOURCES INST

CYC 1

PI CN 1104450 A 19950705 (199729)\* A23L001-29 <--

ADT CN 1104450 A CN 1994-106338 19940613

PRAI CN 1994-106338 19940613

IC ICM A23L001-29

ICS A23L001-10; A23L001-308; A61K035-78

AB CN 1104450 A UPAB: 19970716

A health-care, nutrient food for dieting solves the contradictive problem of diet food of having an obvious effect on reducing the fat, but poor effect on health. The proposed diet food comprises natural edible substances of natural edible fibers (about 20%), vegetable protein (15-19%) and vegetable fat (4-10%), unsaturated fatty acids such as oleic acid and linoleate, at ratio of 70-80%, and also includes triterpene, flavone, polysaccharides, physiological active substances and some normal or trace elements such as zinc and selenium. The food is suitable for reducing fat and **blood pressure**. This product can reduce the fat while being nutrient.

FS CPI

FA AB

MC CPI: D03-H01T2

L99 ANSWER 2 OF 3 WPIX COPYRIGHT 2006 THE THOMSON CORP on STN  
 AN **1988-087068** [13] WPIX  
 DNC C1988-038944  
 TI Edible fat compsn. containing linoleic and linolenic acids - used for preventing allergosis, thrombosis and **hypertension**.  
 DC B05 D13  
 PA (OKUY-I) OKUYAMA H  
 CYC 1  
 PI JP 63036744 A 19880217 (198813)\* 6 <--  
 ADT JP 63036744 A **JP 1986-179608 19860730**  
 PRAI **JP 1986-179608 19860730**  
 IC A61K031-20  
 AB JP 63036744 A UPAB: 19930923  
 An edible oil and fat compsn. having activity for preventing allergosis and thrombosis **hypertension** comprises at least 20 weight % of alpha-linolenic acid and the weight ratio of alpha-linolenic acid and linoleic acid of at least 1.  
 Pref. content of alpha-linolenic acid in the oil and fat compsn. is at least 20 weight (pref. 30) weight %. The weight ratio of alpha-linolenic acid and linoleic acid is at least 1 (at least 3).  
 USE/ADVANTAGE - The compsn. prevents allergosis, thrombosis and **hypertension**.  
 O/O  
 FS CPI  
 FA AB; DCN  
 MC CPI: B04-B01B; B04-B01C; B10-C04E; B12-D02; B12-F05; B12-H02; D03-C

L99 ANSWER 3 OF 3 WPIX COPYRIGHT 2006 THE THOMSON CORP on STN  
 AN **1986-294982** [45] WPIX  
 DNC C1986-127860  
 TI Egg, meat or milk containing biologically active cpd. - obtd. from or domestic animal after giving it feed containing gamma linoleic acid.  
 DC C03 D13  
 PA (AGEN) AGENCY OF IND SCI & TECHNOLOGY; (KANF) KANEGAFUCHI CHEM KK; (NOSA) NIPPON NOSAN KOGYO KK  
 CYC 1  
 PI JP 61216658 A 19860926 (198645)\* 4 <--  
 ADT JP 61216658 A **JP 1985-54298 19850320**  
 PRAI **JP 1985-54298 19850320**  
 IC A23C009-15; A23L001-30  
 AB JP 61216658 A UPAB: 19930922  
 Egg, meat or milk containing a biologically active cpd, obtd. from a fowl or domestic animal after giving it a feed containing gamma linoleic acid (I), is claimed.  
 ADVANTAGE - As the egg, meat or milk contains (I), it prevents the **high blood pressure** or getting fatty to eat it.  
 O/O  
 FS CPI  
 FA AB  
 MC CPI: C04-B04A3; C04-B04K; C04-B04M; C12-F05; D03-H01T

=> => d his

(FILE 'HOME' ENTERED AT 09:28:10 ON 27 JAN 2006)  
 SET COST OFF

jan delaval - 27 january 2006

FILE 'HCAPLUS' ENTERED AT 09:28:25 ON 27 JAN 2006

L1 E WADSTEIN/AU  
17 S E4,E5  
E REMMEREIT/AU  
L2 6 S E4  
E NATURAL/CS,PA  
E NATURAL NUT/CS,PA  
L3 2 S E9-E16  
E NAT NUT/PA,CS  
E US99-410484/AP,PRN  
E US98-104032/AP,PRN  
L4 22 S L1-L3  
SEL RN 17

FILE 'REGISTRY' ENTERED AT 09:37:39 ON 27 JAN 2006

L5 32 S E1-E32  
L6 3 S L5 AND C18H32O2  
L7 2 S L6 NOT IDS/CI  
L8 1 S L6 NOT L7  
L9 1 S 60-33-3  
E C18H32O2/MF  
L10 193 S E3 AND OCTADECADIENOIC ACID  
L11 9 S L10 AND 9 12  
L12 5 S L11 NOT LABELED  
L13 5 S L9,L12  
E C18H36O2/MF  
L14 4 S L10 AND CONJUGAT?  
L15 1 S 57-11-4/CRN AND CONJUGAT?  
L16 4 S L8,L14,L15  
L17 5 S 544-71-8 OR 544-70-7 OR 2540-56-9 OR 872-23-1 OR 1839-11-8  
L18 7 S L10 AND 9 11  
L19 2 S L18 NOT L17  
L20 1 S L19 AND L16  
L21 4 S L16,L20  
L22 1 S L19 NOT L20  
L23 6 S L17,L22 AND L18  
L24 4 S 2420-44-2 OR 1072-36-2 OR 7307-45-1 OR 2420-56-6  
L25 7 S L10 AND 10 12  
L26 7 S L24,L25  
L27 2 S L26 AND L21  
L28 4 S L21,L27  
L29 5 S L26 NOT L28  
L30 4 S L28 AND L5-L29  
L31 5 S L13 AND L5-L30  
L32 4 S L23 AND L5-L31 NOT L30  
L33 5 S L29 AND L5-L32  
L34 5 S L10 AND 9 AND 12 NOT L31  
L35 3 S L10 AND 9 AND 11 NOT L32  
L36 2 S L10 AND 10 AND 12 NOT L33  
L37 4 S L30,L35,L36

FILE 'HCAPLUS' ENTERED AT 09:58:21 ON 27 JAN 2006

L38 1927 S L37  
L39 35234 S L31  
L40 357 S L32  
L41 263 S L33  
L42 2754 S ?CONJUGAT?(S)LINOLEIC(S)ACID  
L43 3059 S CLA  
L44 11 S L4 AND L38-L43  
E HYPERTENSION/CT

L45 47447 S E3-E27  
     E E3+ALL  
 L46 47447 S E4+NT  
 L47 76930 S E4/BI OR E5/BI OR E6/BI  
     E E9+ALL  
 L48 41564 S E3+NT  
 L49 100028 S E3/BI  
     E E10+ALL  
 L50 5939 S E4+NT  
 L51 17094 S E4/BI OR E5/BI OR E6/BI  
     E E8+ALL  
     E E9+ALL  
     E E8+ALL  
 L52 27819 S E4  
 L53 35595 S E5/BI  
 L54 449 S L38-L43 AND L45-L53  
 L55 16 S L54 AND L38  
 L56 37 S L54 AND L42,L43  
 L57 1 S L54 AND L40 AND L41  
 L58 37 S L55,L56 NOT L57  
     SEL AN 1 3 5-7 9-18 20-23 25 26 28-31  
 L59 25 S L58 AND E1-E49  
 L60 12 S L58 NOT L59  
 L61 154 S L40 AND L41  
 L62 976 S L8  
 L63 12 S L61,L62 AND L45-L53  
 L64 3 S L63 NOT L59  
 L65 9 S L59 AND L63  
 L66 25 S L59,L65  
     SEL HIT RN

FILE 'REGISTRY' ENTERED AT 10:18:38 ON 27 JAN 2006

L67 5 S E50-E54  
 L68 5 S L67 AND L31,L32,L33,L37

FILE 'REGISTRY' ENTERED AT 10:19:11 ON 27 JAN 2006

FILE 'HCAPLUS' ENTERED AT 10:19:20 ON 27 JAN 2006

FILE 'WPIX' ENTERED AT 10:20:22 ON 27 JAN 2006

L69 482 S L42/BIX  
 L70 506 S L43/BIX  
     E A61K031-200/IC,ICM,ICS  
 L71 775 S E3-E15  
 L72 280 S E6-E10  
     E A61K031-200/ICA,ICI  
 L73 9 S E5-E8  
     E A61K031:200/ICI  
 L74 18 S E4,E5  
     E CONJUGATED LINOLEIC ACID/CN  
 L75 1 S E6  
 L76 1 S E5  
     E 9,11-LINOLEIC/CN  
 L77 1 S E4-E5  
 L78 2 S E6,E7  
     E 10,12-LINOLEIC/CN  
     E 10,12-OCTADECA/CN  
 L79 1 S E2  
 L80 6 S L75-L79  
     SEL DCSE

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      EDIT /DCSE /DCRE
L81      896 S E1-E6
          SEL SDCN L80
          EDIT E7-E13 /SDCN /DCN
L82      1259 S E7-E13
L83      1972 S 0206/DRN
L84      3282 S L69-L74,L81-L83
L85      4 S L84 AND (B14-F02A OR C14-F02A OR B12-F04 OR C12-F04)/MC
L86      4 S L84 AND P525/M0,M1,M2,M3,M4,M5,M6
L87      38 S L84 AND A61P009-12/IC,ICM,ICS,ICA,ICI
L88      0 S L84 AND A61P009:12/ICI
L89      43 S L85-L88
L90      0 S L89 AND (WADSTEIN ? OR REMMEREIT ?)/AU
L91      4 S L89 AND PY<=1998
L92      9 S L89 AND PRY<=1998
L93      9 S L89 AND AY<=1998
L94      118 S L84 AND (L47 OR L49 OR L51 OR L53)
L95      136 S L84 AND (HYPERTENS? OR BLOOD(S)PRESSURE OR HYPOTENS? OR ANTIH
L96      104 S L94,L95 NOT L89
L97      30 S L96 AND (PY<=1998 OR PRY<=1998 OR AY<=1998)
L98      39 S L91-L93,L97
          SEL AN 20 38 39
L99      3 S L98 AND E14-E16

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FILE 'WPIX' ENTERED AT 10:59:29 ON 27 JAN 2006

FILE 'MEDLINE' ENTERED AT 10:59:54 ON 27 JAN 2006

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          E CONJUGATED/CT
          E E10+ALL
          E E2+ALL
L100      431 S E12+NT
L101      2030 S L42 OR L43
L102      2030 S L100,L101
          E HYPERTENSION/CT
          E E3+ALL
L103      158192 S E4+NT
          E E17+ALL
L104      32292 S E6
          E BLOOD PRESSURE/CT
          E E3+ALL
L105      185079 S E6+NT
          E E21+ALL
L106      16771 S E4+NT
L107      17 S L102 AND L103-L106
L108      8 S L107 AND PY<=1998

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FILE 'EMBASE' ENTERED AT 11:02:54 ON 27 JAN 2006

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          E CONJUGATED/CT
L109      277 S E118+NT OR E118-E127
L110      129 S E128-E147
L111      278 S L109,L110
L112      824 S L42
L113      152 S L111,L112 AND PY<=1998
          E HYPERTENSION/CT
L114      0 S L113 AND E3+NT
          E BLOOD PRESSURE/CT
L115      0 S L113 AND E3+NT
L116      0 S L113 AND (?HYPERTENS? OR BLOOD(S)PRESSUR?)

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